

**ORGANIZATIONAL LEARNING AND LEADERSHIP:
MODERATING EFFECT OF ORGANIZATIONAL CULTURE**

By

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**ORGANIZATIONAL LEARNING AND LEADERSHIP:
MODERATING EFFECT OF ORGANIZATIONAL CULTURE**

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for the Degree of
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STATEMENT

The work contained in this thesis entitled “Organizational Learning and Leadership: Moderating Effect of Organizational Culture” has been carried out by me under the supervision of Dr. Nachiketa Tripathi, Associate Professor, Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati, India. This work has not been submitted elsewhere for the award of any degree.

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CERTIFICATE

This is to certify that the work contained in the thesis entitled “Organizational Learning and Leadership: Moderating Effect of Organizational Culture” by Sonia Nongmaithem (Roll No. 04614101), a student in the Department of Humanities & Social Sciences, Indian Institute of Technology Guwahati, for the award of the degree of Doctor of Philosophy was carried out under my supervision. The results embodied in the thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

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As I sit down to write this section after all the arduous task of completing the dissertation, I am filled with mixed emotions. Though I am delighted that, now the five long years of dedicated work is meandering to a meaningful outcome, yet there is a tinge of sadness as I am about to leave my comfort zone and spread out my wings to explore the new horizon. However, this is the way of life and I welcome it.

The last five years of my research work has been a journey which I will cherish throughout my life as I have learnt many things (not only academics) which has made me realize the different hues of life and made me more mature in my outlook. And there are different individuals who have played their parts to make me feel so. First and foremost, I would like to express my gratitude to my supervisor, Dr. Nachiketa Tripathi who had the faith in me and guided me for the present research work. The variety of things which I have learnt from him is innumerable, be it Psychology (especially OB), research methodology, SPSS, how to write journal papers, the technicalities of writing reference (APA) and the amount of learning that took place when I attended his classes will go a long way in furthering my career in this field. Besides these, he has always supported me when things were unfavorable and I had started losing hope, corrected me when I was wrong, and above all giving me the confidence to believe in myself. Thank you once again. You are the true epitome of a teacher. I would also like to thank Dr. Braj Bhusan, Prof. N K Sharma, Prof. Janak Pandey and Prof. Lilavati Krishnan. I extend my gratitude to Prof. Hofstede and Prof. Ellis for giving me their consent to use their scales. I express my sincere thanks to Prof. Jagdeep Singh of Case Western Reserve University for his timely help during my analysis of organizational culture scale. I would like to thank my doctoral committee and the department for their support.

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Organizational Learning and Leadership: Moderating effect of Organizational Culture

Synopsis

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In recent years, the focus of most of the organizational studies has been on the ability of organizations to respond suitably to the continuous changes in the external environment (Llorens-Montes et al., 2005) because organizations are open systems which function in dynamic environment and their successful survival depends on their ability to learn and adapt to pressures as well as prospects presented by such environment (Burke, 2002; Katz & Kahn, 1978). Though various factors, such as, economic conditions, bad strategic decisions, changing technology, etc., play a role in “organizational demise” (Hannah & Lester, 2009); yet, Argyris and Schon (1978) as well as Mintzberg, Ahlstrand and Lampel (1998) suggest that this demise is often a result of an organization's failure to learn and subsequently adapt. Hence, it has been assumed that organizational learning is an important determinant of long-term performance and survival for organizations (DeGues, 1988; Garvin, 1993; Yukl, 2009).

However, despite the abundance of literature on this concept, “there was lack of cumulative and integrative work” (Lipshitz, Popper & Friedman, 2002). Therefore, taking clues from the gaps in the conceptualization of organizational learning so far, an attempt was made in this research work to provide a basis for strengthening the conceptualization of organizational learning by adopting a process-oriented view of organizational learning (e.g., Argyris & Schon, 1978; Crossan, Lane & White, 1999)

because learning is seen as a continuous process which helps an organization to adapt successfully to the volatile external environment. It is also a way of improving and furthering the core competence of organizations, especially for knowledge driven organizations (Prahalad & Hamel, 1990). Therefore, the present research has attempted to provide a consolidated framework of organizational learning by adopting a process-oriented view of organizational learning and by incorporating conducive contextual factors which will allow the organizations to develop the learning processes. Formulating the framework necessitated to study the differences in organizational learning processes because organizations, functioning in different environments, adopt different organizational learning processes to remain competitive and also to be successful (Argote, 1999; Ellis & Shpielberg, 2003). Moreover, it is also important to explore how contextual factors like leadership, strategy and organizational culture affect these processes as these factors are seen as essential for initiation and effective implementation of organizational learning processes in organizations. Leaders play the most crucial role for initiating and instituting organizational learning in the organization (Ellis, Caridi, Lipshitz & Popper, 1999; Popper & Lipshitz, 2000) as leadership is often required in order to change the existing thinking and practice present in the organization in order to enable learning to take place. Leaders can directly encourage and facilitate collective learning by what they say and do and they can indirectly influence it by creating cultures, systems and structures that foster the absorption, assimilation and application of knowledge (Kavanagh & Ashkanasy, 2006).

However, to date, there is limited systematic research directly linking leadership and learning (Popper and Lipshitz, 2000; Berson, Nemanich, Waldman, Galvin & Keller, 2006). Some attempts have been made to deal with this subject (Senge, 1990b; Schein, 1993; Davenport and Prusak, 1998; Edmondson, 1999; Lipshitz et al., 2002), mostly at the conceptual level. For example, theoretical work by Vera and Crossan (2004) systematically linked strategic leadership and organizational learning. A few studies have, however, examined leadership roles in learning in certain settings such as hospitals, community clinics (e.g., Edmondson, 1999; Popper

& Lipshitz, 2000; Amitay, Popper & Lipshitz, 2005). These empirical works are very few at this point of time, and they deal with a very small and selective number of leadership and organizational learning variables. Additional aspects of leadership that is conducive to organizational learning have yet to be analyzed and empirically investigated (Amitay et al., 2005).

It has also been observed that organizational culture acts as a system of social control and can influence employees' attitudes and behaviour through the values and beliefs propounded by the leaders (Flynn & Chatman, 2001; Schein, 1991, Sinha, 2008). DeLong and Fahey (2000) argued that culture is a key component of knowledge management and organizational learning. Moreover, for organizational culture to function effectively as a managerial control mechanism, the organizational culture and the formal organizational structure must be harmoniously interrelated (Worley, Hitchin & Ross, 1996) as well as aligned with the demands and predispositions of the environment in which the organizations operates (Kampas, 2003). Thus organizational culture, in addition to the capability to integrate daily activities of employees to reach the planned goals, can also help organizations adapt well to external environment for rapid and appropriate response (Daft, 2001), which is a very important characteristic of organizational learning. Different authors have stated that cultures and values facilitate organizational learning and this shows the importance of culture in fostering organizational learning. Therefore, the researcher has raised certain questions in this regard in order to consolidate and construct a concrete body of the relationship between organizational culture and organizational learning,

Apart from organizational culture, strategy is also an important component for effective implementation of organizational learning (Fiol & Lyles, 1985; Francis & Mazany, 1996) as it influence the firm's learning by providing a boundary to decision making and a context for the perception and interpretation of the environment (Fiol & Lyles, 1985), so the researcher has also attempted to study how different types of strategies affect the organizational learning processes.

Since organizational learning provides the opportunities as well as the systems and mechanisms to the organizational members to acquire, create and utilize knowledge, it is considered as an important source of core competence of the organizations as it leads to better performance and in turn affects the satisfaction of the workforce (Gardiner & Whiting, 1997). Hence, an attempt was made to explore its effect on the job satisfaction of the organizational members.

Therefore, from the review of literature on organizational learning and the various factors which affect it as well as its outcome, the following research questions were framed and the present research attempted to answer them -

- 1) What are the differences in organizational learning processes across organizations?
- 2) What are the different leadership styles or combination of leadership styles that facilitate organizational learning?
- 3) What is the impact of top management leadership style on organizational learning?
- 4) Are there certain kinds of culture that are the prerequisite for organizational learning?
- 5) Which kind of culture promotes learning that is beneficial to the organization?
- 6) What is the role of strategies in the effective implementation of organizational learning process in an organization?
- 7) What is the impact of all these factors on the success of the organization?

As evident from the review of literature, different organizations follow different organizational learning processes (Argote, 1999; Ellis & Shpielberg, 2003). But the imminent question is what the differences in these processes are. Study 1 made an attempt to study the differences in organizational learning processes across different Indian organizations, that is, banking sector and academic institute.

Another point which it attempted to explore is the relationship between these different organizational learning processes and job satisfaction because different researchers have assumed the important positive outcomes of organizational learning, but there are only few empirical studies that have tried to explore its links with job satisfaction (Chang & Lee, 2007; Chiva & Alegre, 2009).

As already stated, this study was carried out on two samples. The first sample was drawn from banking sector in Guwahati city of Assam. The data were collected from 57 employees (male = 47 and female = 10) who had the minimum educational qualification of graduation. The mean and SD of the age of the employees and tenure in the present job were $M = 39.67$ years, $SD = 11.41$ and $M = 11.88$ years, $SD = 11.38$, respectively. The second sample were collected from 83 faculty members (male = 77, female = 6) who had the educational qualification of doctorate degree. The mean and SD of the age of the faculty members and tenure in the present job were $M = 36.40$ years, $SD = 5.15$ and $M = 3.87$ years, $SD = 3.13$, respectively. The subjects of both samples were contacted personally and were requested to fill the questionnaire, which consisted of measures of organizational learning and job satisfaction. Organizational learning measure comprise of 24 items that were framed by the researcher using dimensions drawn from the study by Mehra and Dhawan (2003). Factor analysis yielded four dimensions of organizational learning, namely, Essential Processes of Organizational Learning, Interaction, Flexibility and Innovativeness. Job satisfaction is measured through Schnake's (1983) 11 items scale, having 3 dimensions- Social Satisfaction, Extrinsic Satisfaction and Intrinsic Satisfaction.

It was found from Study 1 that there are differences in the organizational learning processes across different organizations on all the four dimensions of organizational learning, namely, Essential Processes of Organizational Learning, Interaction, Flexibility and Innovativeness. However these differences depend on the need and demand of the environment in which the organization is functioning. As found in this study, the banking sector where the environment is quite turbulent,

organizational learning exceed as compared to that of the academic institute which function in a fairly stable environment.

Therefore, after having found the answer to the research question related to the differences in the organizational learning processes, the researcher conducted Study 2A to answer the remaining research questions - (1) what are the different leadership styles which have impact on organizational learning and the nature of their relationships, (2) what are the certain kind of organizational culture which are prerequisite for organizational learning and what is its impact on organizational learning, (3) how do the different strategies adopted by the organization affect organizational learning, and finally (4) what is the impact of these variables on job satisfaction. Specific hypotheses were framed in reference to these questions.

Two different samples participated in this study. The first one comprised of middle level managers (N = 286) from 15 different organizations (13 public sector and 2 private sector) located at Delhi, Bangalore and Kolkata. Their mean age was 41.5 years (SD = 10.0) while the second sample consisted of top management of the organizations such as Executive Director and General Manager (N = 29, Male = 27, Female = 2) who had the decision making power. Their mean age was 49.6 years (SD = 5.85). Data was collected through two sets of questionnaires. Set 1 comprised of four sections - Multifactor Leadership Questionnaire (Bass & Avolio, 2004), organizational learning (Ellis & Globerson, 1996), organizational culture (adapted from Hofstede, 1990) and job satisfaction (Schnake, 1983). While Set 2 consists of measure of business strategy (Venkatraman, 1989).

The results of this study showed that there were positive relationships between leadership (transformational and transactional leadership) and organizational learning. It was influenced by organizational culture characterized by concern for the welfare of the employees. This type of culture encourages the employees to come out with ideas and opinions, to adhere to the rules and regulations of the organizations and to work for the benefit of the organization by

putting their maximum effort and even taking risks. There was also the influence of business strategy that is characterized by both analytic and proactive approach, on this relationship between leadership and organizational learning.

Then the qualitative study (Study 2B) was conducted to augment the results of quantitative studies (Study 1 and Study 2A). For this study, interviews were conducted on the top management of the organizations such as Executive Director and General Manager of 13 different public sector organizations from which data for Study 2A were collected. This study was basically designed to explore answers to the following questions (most of them were extensions of the questions in Study 1 and Study 2A) from the top management's point of view – (1) whether there is sharing of knowledge and information amongst the members of the organization, (2) what are the mechanisms that facilitate such processes, (3) whether these processes have impact on the performance of the organizations in terms of profitability of the organizations, (4) what are the role of leaders, organizational culture and strategies in terms facilitating these processes, and finally (5) whether the organizations, through these processes, are able to learn and then create knowledge base which would help the organization in innovation, in the future.

It was observed from the results of this study that organizational learning is taking place in these organizations and they adopted various formal (structured) and informal (unstructured) mechanisms to facilitate this process. The formal mechanisms included training, seminars, meetings, periodicals, guideline books, newsletters, and bulletins. There was also the use of intranet and internet in disseminating information to the organizational members and also as a means of maintaining communications with them. While informal mechanisms comprised of interaction among members in a team, informal networks such as 'supervisors' network', "idea club", etc. It was also found that leadership, comprising both transformational and transactional style, emerged as an important factor which influenced the learning and sharing of information and expertise that occurred in the organizations. While organizational culture present in their organizations

comprised of characteristics such as transparency, accountability, trust, openness, accessibility of the leaders, etc. that are similar to the components of learning culture (Lucas & Kline, 2008; Popper & Lipshitz, 1998). The role of strategy was also evident in this study. It was observed that proactive strategy helped the organization to cope with the continuous changes in the external environment. One of the most important findings of this study was the impact of organizational learning on the performance of the organization.

Contribution and Implications

The present research was conducted with the purpose to strengthen the concept of organizational learning by adopting a process-oriented view and by establishing the impact of various contextual factors which affect its initiation and implementation in organizations. It has served the intended purpose to certain extent and following are its contributions and implications. This is divided into three parts- (1) theoretical contributions, (2) methodological contributions and (3) practical implications. These are described below-

(1) Theoretical contributions

It was evident from the studies conducted in this research work that organizational learning is a multi-faceted process which is practiced by different organizations to different extent. Implementing this process and practicing it depends on various factors such as leadership style, organizational culture and strategy, beside others. It was observed that a leadership style comprising of characteristics of both transactional and transformational leadership style is the most effective one. Organizational culture characterized by concern for welfare of the employees and adherence to rules and regulations play crucial role. This type of culture also encourages the employees to come out with ideas and opinions, to adhere to the rules and regulations of the organizations and to work for the benefit of the organization by putting their maximum effort and even taking risks. There is

also the influence of business strategy that is characterized by both analytic and proactive approach, on this relationship between leadership and organizational learning.

Thus, the framework proposed in this research work has been supported. This framework also lends support to some aspects of the “*multi-facet model of organizational learning*” proposed by Lipshitz et al., (2002). Organizational learning mechanisms identified in this study bear resemblance to those described by them in “*structural facet of organizational learning*”. Besides, the role of culture, i.e., the “*learning culture*” proposed by these scholars in their model has been supported in the studies reported in Chapter 3. Such culture comprises of characteristics such as transparency, accountability, trust, openness, accessibility of the leaders, etc which was also observed from the responses of the top bosses in the qualitative study.

(2) *Methodological contribution*

It is worth mentioning that an off-shoot of this research work is the development of a scale for measuring organizational learning. Though, it was not the main purpose of the present research, however, the non-accessibility to standard complete tool for measuring organizational learning during the initial period of commencement of this research work compelled the researcher to develop the questionnaire based on the dimensions of Mehra and Dhawan (2003). Factor analysis of this scale yielded four dimensions reported in Study 1 (essential processes of organizational learning, interaction, flexibility and innovativeness). The reliability coefficients were satisfactory. Interestingly, this scale has shown consistent reliability in subsequent use of this scale for project works by the under-graduate students, enrolled in the Organizational Behaviour course, in the institute where the researcher works as a Ph D scholar.

It is also important to note that there are very few studies which have employed the qualitative method (for e.g., Lipshitz & Popper, 2000) in order to

explore the concept of organizational learning and its correlates. Therefore, Study 2B is contribution to that limited number of such qualitative study. Moreover, this method has its own value as it helps to explore a concept in-depth and to obtain detailed descriptions and views on the concerned topic (Creswell, 1998).

(3) *Practical implications*

This research work has tried to highlight the crucial role that different styles or combination of the different styles of leadership plays in creating a conducive culture which will foster organizational learning. Both Transformational and Transactional leadership have their role to play in fostering organizational learning. Therefore, top management of organizations should have the knack to understand the need of the hour and the situation and try to use the different leadership style. For example, Contingent Reward leadership behaviour should be used when there is a need for a clear picture about the requirements of the job. Such leader is effective as he rewards the employees in exchange for satisfactorily carrying out the assignment and further motivates the subordinates to engage in activities which will contribute to their growth as well as of the organization. Moreover, it helps to establish a relation between the leaders and the followers, which is based on trust, dependability, and perceptions of consistency of leader's behaviour (Avolio & Bass, 1991). This, in a way would contribute to maintaining a congenial culture in the organization which will foster the members to be more open, accountable and trustworthy. It also provides the ideal condition that facilitates more sharing of knowledge and experience and more open interaction among the organizational members. All these aspects contribute to organizational learning.

However, Laissez-faire and Management-by-Exception leadership styles termed as "passive/corrective leadership" (Avolio et al., 1999; Den Hartog et al., 1997) are passive and neither is there an attempt to motivate the followers nor timely response to their needs. The leader intervenes only when things have gone wrong. These leadership styles may not be the appropriate way to lead organizational

members because these types of behaviours are “highly dissatisfying” (Avolio, 1999). Therefore, top management in organizations should be wary of these styles and try to avoid using these styles to the extent it is possible.

In this endeavour of instituting organizational learning in organizations, business strategy also plays a critical role as the strategy adopted by the top management decides what type of organizational learning will be fostered in the organization. It was evident from this research work that organizational learning would be fostered in organizations whose strategies focus on innovation, seek new opportunities and is future oriented and think ahead of contemporaries. Such organizations also try to search deeper for the root cause of problems and find the best possible solutions. They also focus on improving market position faster than its competitors.

Limitations

Following are the various limitations of the present research work-

1. The sample of Study 2A and 2B are basically from public sector, except for two organizations from the private sector. Therefore, limited generalization can be drawn from this study to other type of organizations.
2. A general limitation of such study is the use of self reporting method. Therefore, there are chances that the respondents may be affected by the social desirability factor.
3. The sample size of the top management is quite small (N = 29). Though the number of top bosses taken for the present study was representative of the target population, however it would be better to increase the size of the target population and consequently, the sample size in order to increase the power of generalization.

4. In the case of the qualitative study, one of its limitations is the use of individual interview data to infer organizational level phenomena.
5. Another limitation of the qualitative study is generalization of findings from few cases (Lipshitz & Popper, 2000). But, this problem is resolved by the fact that this study has basically tried to substantiate the findings of the quantitative study and both studies were conducted on same conceptual line and addressing similar unanswered questions that resulted from the review of literature on organizational learning.

Direction for future research

1. It is quite difficult to empirically establish direct causal relationship between organizational learning and organizational outcome, especially financial performance. This may be due to the fact that the financial performance of an organization is determined by many factors such as availability and quality of resources, in terms of both, material and human resources, the management style of the leaders at the helm of affairs of the organization, the business strategy adopted by the top management, the economic environment, etc. Though some researches (Ellinger et al., 2002; Bhatnagar, 2006; Milia & Birdi, 2009) have found link between organizational learning and financial performance, but more studies are required which should explore the various aspects that contribute to it along with the role of organizational learning.
2. Since it takes a relatively long duration to finally bear tangible results of organizational learning, longitudinal studies should be conducted in order to assess to the impact of organizational learning on the performance of the organization.
3. Future studies should use the framework propagated in this research and conduct study in the IT sector as it is a knowledge-intensive organization and moreover,

organizations in this sector have to face continuous influx of new technology, volatile market, etc. Therefore, they have to continuously adapt themselves, hence the need to focus on organizational learning.

4. The present study focused on organizational learning mechanisms in order to explore the processes and mechanisms used by organizations. However, future research should focus on organizational learning capability because the capacity to learn has also been considered as an important means for the effective functioning of an organization and its potential for growth (Jerez-Gomez, Cespedes-Lorente & Valle-Cabrere, 2005). Therefore, future research should use the model presented in his research but adopt organizational learning capability instead of organizational learning mechanisms and study the dynamics of the relationship with the various contextual variables and finally their outcome.
5. In this research work, learning is basically seen at the organizational level. However, there are evidences that learning takes place at various levels – individual, group/team and organizational levels (Crossan et al., 1999; Hannah & Lester, 2009) and contribute to the overall performance of the organization. Some theoretical propositions have been propounded by Crossan et al. (1999) and Hannah and Lester (2009) in this area while few empirical studies have been conducted, such as Birdi, Patterson & Wood (2007), Milia & Birdi (2009), etc. However, there is the need to conduct more empirical research in this direction as it might provide a wealth of information regarding the dynamics for the learning at various levels in the organizations and its impact of the success of the organization.

Finally, it can be concluded from this research work that organizational learning is a multi-faceted process which is practiced by different organizations to different extent. Implementing this concept and practicing it fruitfully depends on various factors such as leadership style, organizational culture and strategy, beside others. All these factors have an impact on the success of the organization.

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Chapter 1

Introduction

In the past few decades there has been a surge in the interest in learning processes in organizations. This is basically based on the belief that learning and innovating are essential prerequisites for survival in fast-changing and competitive environments (DeGues, 1988; Nonaka, 1991; Schein, 1993a). In many organizations, learning is given priority by company management and has become the essence of productive activity because learning is considered to infuse new ideas into the organization, increases the capacity to understand new ideas and fosters creativity and innovation (Damanpour, 1991). Organizational learning is, therefore, gaining currency amongst many large organizations as they attempt to develop structures and systems which are more adaptable and responsive to change (Dodgson, 1993).

Learning is a dynamic concept and it emphasizes the continually changing nature of organizations. The focus is gradually shifting from individual learning to organizational learning. Just as learning is essential for the growth of individuals, it is equally important for organizations. Since individuals form the bulk of the organization, they must establish the necessary forms and processes to enable organizational learning in order to facilitate change. Organizational learning is more than the sum of the parts of individual learning (Dodgson, 1993; Fiol & Lyles, 1985). An organization does not lose out on its learning abilities when members leave the organization (Hedberg, 1991). Organizational learning contributes to organizational memory as learning is gradually transferred to the several functions of an organization and the policies and practices of the organization also incorporate them and become a part of its system (Mehra & Dhawan, 2003). Thus, learning systems not only influence immediate members but also future members due to the accumulation of experiences, norms, stories, etc.

The concept of a learning organization is increasingly becoming popular since organizations want to be more adaptable to change. In today's fast changing environment, the only organization that will survive will be learning organizations (Manikutty, 2005). Competitive advantage is not static. Organizations cannot place themselves in particular strategic positions in an industry and stay there for all time to come but have to evolve and adapt to new situations. This ability to adapt depends on the amount and kind of learning that takes place continuously in the organizations. Learning is seen as a continuous process to retain and improve competitiveness, productivity, and innovativeness in uncertain technological and market circumstances (Balasubramanian, 1995).

However, despite its popularity and the abundance of publication of articles on the topic of organizational learning since Cangelosi and Dill (1965) discussed this topic in their seminal work on this subject, the literature has failed to congregate on widely accepted definitions and conceptualizations of organizational learning (Amitay, Popper & Lipshitz, 2005; Bontis, Crossan & Hulland, 2002; Easterby-Smith, 1997; Garvin, 2000). This failure mainly stems due to the gaps and confusion generated from conceptions that are "excessively broad, encompassing merely all organizational change...and from various other maladies that arise from insufficient agreement among those working in the area on its key concepts and problems" (Cohen & Sproull, 1991).

Other researchers (Argyris & Schon, 1978; Dodgson, 1993; Fiol & Lyles, 1985; Garvin, 1993; Huber, 1991; Shrivastava, 1983) similarly note the lack of a widely accepted theory or model and have expressed that even a consistent definition of organizational learning has been elusive within the literature. Moreover, different researchers have studied this concept from different disciplines and approaches, such as psychology, management science, economics, strategy, production management, sociology, cultural anthropology, business/innovation, etc. (Dodgson, 1993; Easterby-Smith, 1997), leading to more divergence. Following is a brief preview of the perspectives on organizational learning offered by some of the disciplines and approaches-

Psychological perspective

The focus of this discipline has been on the cognitive aspects of the learning process. Various researchers (Dixon, 1994; Kim, 1993; Nonaka, 1994) have described about how the cognitive maps formed by individuals are made explicit so that they can be shared and distributed across the organization. Contributions have also been made by the work on experiential learning (Kolb, Rubin, & McIntyre, 1973). For example, the model of experiential learning has been extended by Dixon (1994) into organizational learning cycle in which an individual's direct experience is shared and then interpreted collectively which leads to responsible action being taken by those involved. It is similar to the concept of "action learning" (Revans, 1971, 1980) which stresses the need to assimilate cognition and action. However, this perspective had certain problems, such as how to move the content of learning from individuals to the collective level and also how, in practice, individuals and organizations find it hard to learn from experience. Moreover, "defensive routines" are set up which makes it hard for people to challenge the status quo (Argyris, 1986, 1992).

Management Science perspective

This perspective gave emphasis on gathering and processing of information in and about the organization (Easterby-Smith, 1997). The works of Argyris and Schon (1978), March and Simon (1958), Huber (1991), Senge (1990) come under this perspective. Huber (1991) was of the opinion that "... an organization learns if any of its units acquire knowledge that it recognizes as potentially useful to the organization". He has identified four main processes from a review of literature: knowledge acquisition, information distribution, information interpretation and organizational memory. The most important way of acquiring knowledge is learning through feedback from the consequences of actions. This idea is derived from cybernetics and has been popularized by Argyris and Schon (1978) through the concepts of single loop, double loop and deuterio learning. Moreover, the systems

approach offered by several scholars of this discipline added two important ideas, such as “holistic view” of learning and the concept of “informating”.

Sociological perspective

The focus of this discipline is on the “social systems and organizational structures” (Easterby-Smith, 1997) where learning is embedded and which may affect organizational learning. Some of the scholars of this discipline suggest that the meaning and functions of organizational learning varies according to the nature of the organization. This view is also known as *contingency view*. Shrivastava (1983) has illustrated in his research work that different structures and cultures lead to distinct learning processes. Another view, that is, the *constructivist view* gives emphasis on informal learning as compared to formal. These have been referred to as “non-canonical” and “canonical” work practices respectively by Brown and Duguid (1991). They are of the opinion that training and socialization processes are likely to be ineffective if based on canonical practice, instead of on the more realistic non-canonical practice.

Some of the important contributions from this perspective are that it provided a fundamental questioning of the nature of learning in organizations and the processes are that are involved, and also it raises the question about whose interests are served by the concept of organizational learning.

Strategic perspective

The focus of this perspective on organizational learning has been on “competition” (Easterby-Smith, 1997), and learning is assessed according to whether it gives one organization an advantage over others. Therefore, the main emphasis should be on learning more efficiently than its competitors (Hamel & Prahalad, 1993). It has been proposed that this can be achieved through alignment that is, obtaining

the best relationship between the organization and its environment (Fiol & Lyles, 1985).

The main contributions of this perspective are the identification of the continuing debate over how far organizations are capable of adapting to changing environmental circumstances; the importance of direct experience and the significance of the tacit knowledge that can result from it; and that exchanges of technical information are crucial among communities of high technology companies, while among joint-venture partners exchange of general management practices is more important.

Cultural Perspective

The main emphasis of this perspective has been on “culture”, both in its organizational and national manifestations. It has been attributed as the significant cause and effect of organizational learning (Easterby-Smith, 1997). There have been many views of what constitutes culture. National culture can be seen as a relatively stable attribute of general population while organizational culture has been observed as values and beliefs that are determined by the top managers and which permeates the whole organization (Deal & Kennedy, 1982). It has also been pointed out that the conception of learning is different within different cultural contexts. Researchers who adopt a constructivist view (Lave & Wenger, 1990; Brown & Duguid, 1991) have argued that significant learning should not be separated from the specific context in which it takes place. Learning, therefore, becomes a product of a community rather than of the individuals in it and as such transferred from one setting to another (Easterby-Smith, 1997).

Some of the important aspects that have been highlighted by this perspective are that it showcased the importance of values and beliefs and has shown that culture may affect both the process and nature of organizational learning. It has also raised

question of whether some cultures may be considered as essential and superior to others in their facilitation of learning.

Besides the above stated variety of perspectives on organizational learning which are offered by various disciplines, there is also fragmentation in the approach adopted by academicians and practitioners/ organizational consultants (Argyris & Schon, 1996; Easterby-Smith, 1997; Lipshitz & Popper, 2000). Academic researchers have focused more on the conceptual aspects of organizational learning and concentrates on understanding learning processes in organizational settings while for the practitioners, it has an “action-orientation, and is geared towards creating an ideal type of organization in which learning is maximized” (Easterby-Smith, 1997). There is also difference in the terms used by them. The former have used the term *organizational learning* while the latter have basically referred to it as *learning organization*. The concept of learning organization has been popularized by Senge (1990) in the US and moreover, this concept has gained world-wide publicity through his book “*The Fifth Discipline*”. Pedler, Boydell and Burgoyne (1989) have been the flag-bearers of this concept of learning organization in UK and have define it as “an organization, which facilitates the learning of all its members and continually transforms itself”, and argue that it comprises of the following characteristics -

- Has a climate in which individual members are encouraged to learn and to develop their full potential.
- Extends this learning culture to include customers, suppliers and other significant stakeholders.
- Continually undergoes a process of organizational transformation.

Another problem which has always afflicted the inconsistency of organizational learning concepts is regarding the treatment of individual-level learning and organizational-level learning as one and the same (Argyris & Schon, 1996; Crossan, Lane & White, 1999; Lipshitz, Popper & Friedman, 2002; Popper & Lipshitz, 1998). While some researchers see both the processes, i.e., individual

learning and organizational learning as same (Hedberg, 1981), there are some researchers, who do not agree with this line of thinking (Argyris & Schon, 1978; Dodgson, 1993; Fiol & Lyles, 1985). However, it is important to mention that though individuals do learn and facilitate the process of organizational learning, but the point of departure of organizational learning from individual learning is at the level of analysis, which in the case of organizational learning is the organization. Moreover, there is another problem of attributing human like qualities to organizations, that is, “the problem of anthropomorphism” (Lipshitz, Popper & Oz, 1996). The human nervous system is equipped to perform the tasks of experiencing, reflecting, conceptualizing and memorizing but the question still remains as to how organizations are equipped to perform these tasks (Lipshitz et al., 1996). Though Simon (1991) and Levitt and March (1988) have tried to solve this problem by reducing organizational learning to the learning by individuals in organizational contexts, however this solution is not satisfactory and Popper and Lipshitz (1998) have offered an insight to this problem by proposing the concept of “organizational learning mechanisms” which are institutionalized systems that allow organizations to systematically collect, analyze, store, disseminate and use information that for effective functioning of the organizations.

Yet another primary impediment to the development of organizational learning theory is also the inconsistent terminologies which are used for comparable concepts. For example, Duncan (1974) mentions of "behavioral-level learning," which is similar to “lower-level learning”, and he describes it as the level of learning that is concerned with controlling the firm as it adjusts to the environment, while Argyris and Schon (1978) refer to it as "single-loop learning," which is the process that follows set of rules and restricts itself to detecting and correcting errors within that given system of rules. “Higher-level learning” (Duncan, 1974), on the other hand, aims at adjusting overall rules and norms rather than specific activities or behaviors and Argyris and Schon (1978) termed it as “double-loop learning”.

One of the most prominent drawbacks of this concept of organizational learning is the lack of sufficient empirical research in this area (Lipshitz & Popper, 2000). According to Lipshitz and Popper (2000), one of the best options for resolving controversies in science is to allow empirical results to determine and settle the issues. However, the amount of empirical studies in the literature on organizational learning is quite small and this seems to create conceptual confusion (Easterby-Smith & Araujo, 2004). Therefore, “in the absence of empirical research, loose conceptualizations continue to hamper derivation of testable propositions and accumulation of findings across different studies” (Lipshitz & Popper, 2000).

Many authors have tried to address these gaps and clarify the confusion (Argyris & Schon, 1996; Crossan et al., 1999; Easterby-Smith, 1997; Huber, 1991; Popper & Lipshitz, 1998; Shrivastava, 1983). For example, Easterby-Smith (1997) have opined that a single comprehensive theory is quite not possible, rather it will benefit to observe it from different complementary perspectives which might enrich the understanding of this concept and in turn, its implementation in organizations.

Taking clues from the gaps in the conceptualization of organizational learning, an attempt has been made in the present research work to provide a basis for strengthening the conceptualization of organizational learning by adopting a process-oriented view of organizational learning (for e.g., Argyris & Schon, 1978; Crossan *et al.*, 1999) because learning is seen as a continuous process which helps an organization to adapt successfully to the volatile external environment and also as a way of improving and furthering the core competence of organizations which is stated as the main resource of knowledge driven organizations (Prahalad & Hamel, 1990). It has also made an attempt to formulate a framework considering contextual factors like leadership and organizational culture as both these factors are seen as essential for initiating and for effective implementation of organizational learning process in an organization. Questions regarding how organizational learning is exhibited in the strategy and policy of the organization have also been raised in this research work. Finally its impact on the performance of the organization is explored.

Models of Organizational Learning

As indicated earlier there is widespread acceptance of the notion of organizational learning; however there seems to be no consensus regarding a definite conceptualization of organizational learning (Argyris & Schon, 1978; Dodgson, 1993; Fiol & Lyles, 1985; Garvin, 1993; Huber, 1991; Shrivastava, 1983; Simon, 1991). The need for consistency in the terminology used for describing the concept of organizational learning has been highlighted in the literature (Simon, 1991). The following is an overview of some important models of organizational learning

1) Organizational learning system model by Shrivastava (1983)

The system concept is frequently in use in organization theory. In connection with the phenomenon of organizational learning, quite a few theorists have proposed to consider organizations as composed of one or more different learning systems. Shrivastava (1983) states that learning systems are those mechanisms that contribute to organizational learning. He contends that such systems contribute by providing decision-relevant information both in formal as well as informal ways. They attempt to objectify the subjective personal knowledge of individual members into an organizational knowledge base. The learning systems of organizations cover different levels e.g. individual, department, plant, corporation, industry, etc. and other areas, and they are not limited to specific parts of the organization. On one dimension they vary according to their individual or organizational level orientation. Individual oriented learning systems are primarily based upon personal characteristics of individuals as the subjects of organizational learning. Organization oriented learning systems are impersonal in character and exist independent of individual members of the organization. On another dimension learning systems vary to what extent they are the product of planning or if they develop purely as a not intended result of certain processes. Through his study Shrivastava concluded that he could identify six main types of learning systems:

A. The one-man institution

This corresponds to a learning situation where one person is the peak coordinator or central manager of an organization, i.e. an organization with a simple structure according to Mintzberg's (1979) typology. The main person is, on the basis of his position, his experience and his knowledge, accepted as the main source of important information in the organization. In this situation organizational learning becomes identical to the learning of the main character/person.

B. Mythological learning systems

Much of the learning in organizations is accomplished through the emergence of myths and exchange of myths and stories. The myths provide the basis for norms and shared values. They influence the development of organizational cultures. They create heroes and villains (Schein, 1985). When new members enter an organization, they are confronted with the myths and socialized through them into the organizational culture.

C. Information seeking culture

By virtue of the kind of business they operate in, some organizations will be more oriented toward actively seeking information from others. Examples of such organizations may be stock brokerage firms, consulting firms, and newspapers. Such organizations will frequently have a kind of network for exchange of relevant information, so that most members can take part in what each individual gathers.

D. Participatory learning systems

Such systems refer to work forms based on committees and project groups to solve strategic and managerial issues. They reflect a style of management where participation in decision-making is institutionalized. Participatory systems stimulate

openness, team spirit and a supportive, trusting environment. Decision-making, however, tend to proceed slowly. One drawback of such system is that the variety of committees can as well create scheduling problems and a situation that is not easy to overview.

E. Formal management systems

The most common methods of perpetuating learning and information flows in organizations are through formal management systems. That is systematic procedures and control mechanisms to set up budgets, make strategic plans, establish information bases, provide regular scanning of environments, etc. Such systems are based on administrative experience and practice, and they find their inspiration in the techniques of modern management science.

F. Bureaucratic learning systems

In bureaucratic organizations, especially in public administration, there exist a comprehensive set of methods and regulations to control the flow of information among the members. Rules specify exactly who shall receive which information. They also specify the type and form of information that at any time will be collected and stored. An objective and neutral form is highly estimated. There is not much place for personal and subjective opinions. Such systems often are more rigid than the formal management systems that were depicted above.

According to Shrivastava, this presentation of alternative learning systems must be understood as preliminary descriptions. The typology needs to be refined. There is a need for further empirical research of each of the systems, the exact nature of their outputs, their strengths and weaknesses, and how they may interact and play together in the same organization.

2) *The 4I framework of organizational learning by Crossan, Lane and White (1999)*

They have identified strategic renewal as the underlying phenomenon of interest and organizational learning as a principal means of achieving the strategic renewal of an enterprise. Renewal harmonizes continuity and change at the level of the enterprise (Hurst, 1995; Hurst, Rush & White, 1989). Renewal requires that organizations explore and learn new ways while concurrently exploiting what they have already learned. Recognizing and managing the tension between exploration and exploitation are two of the critical challenges of renewal and, hence, become a central requirement in a theory of organizational learning.

The 4I framework of organizational learning contains four related processes—intuiting, interpreting, integrating, and institutionalizing -- that occur over three levels: individual, group, and organization.

They have defined the learning process as follows: *Intuiting* is the preconscious recognition of the pattern and/or possibilities inherent in a personal stream of experience (Weick, 1995). *Interpreting* is the explaining, through words and/or action, of an insight or idea to one's self or others. *Integrating* is the process of developing shared understanding among individuals and of taking coordinated action through mutual adjustment. Dialogue and joint action are crucial to the development of shared understanding. *Institutionalizing* is the process of ensuring that routinized actions occur. Tasks are defined, actions specified and organizational mechanisms put in place to ensure that certain actions occur. Institutionalizing is the process of embedding learning that has occurred by the individuals and groups into the organization, and it includes systems, structures, procedures and strategy.

The above stated four learning processes functions over three levels. As the processes naturally flow from one into another, it is difficult to define precisely where one ends and the next begins. It is quite clear that intuiting occurs at the individual level and institutionalizing at the organizational level; however,

interpreting links the individual and group levels, while integrating links the group and organizational levels. When actions take place through the joint effort of members of a workgroup, the interpreting process quite naturally blends into the integrating process. Actions that are deemed to be effective will be repeated and eventually, the workgroup will establish formal rules and procedures, and routines become embedded. This leads to the process of institutionalization.

Organizational learning is a dynamic process. Learning occurs not only over time and across levels, but it also creates a tension between assimilating new learning (feed forward) and exploiting or using what has already been learned (feedback). Through feed-forward processes, novel and innovative ideas and actions flow from the individual to the group and then to the organizational levels. At the same time, what has already been learned feeds back from the organization to group and individual levels, which has an impact on the way people act and think. The concomitant nature of the feed-forward and feedback processes creates a tension because the institutionalized learning (what has already been learned) impedes the assimilation of new learning. Fully assimilating new learning requires the feed forward of learning from the individual and group to become institutionalized within the organization while utilizing what has been learned is a feedback loop of institutionalized learning from the organization to groups and individuals. For example, rules and routines that once were the basis of how to facilitate learning at the individual level may no longer apply in a changed scenario, yet the systems may still focus on those rules which may impede the assimilation and feed forward of new learning (Mintzberg, 1994). Therefore, any theory of organizational learning has to recognize the levels, processes, and dynamic nature of the learning process itself that create a tension between the feed forward and feedback of learning.

3) Argyris and Schon's (1978) three types of organizational learning:

Argyris and Schon (1978) stated three types of learning processes.

- *Single-loop learning (SLL):* Organizational learning occurs when errors are detected and corrected and firms carry on with their present policies and goals. According to Dodgson (1993), SLL can be equated to activities that add to the knowledge-base or firm-specific competencies or routines without altering the fundamental nature of the organization's activities. SLL has also been referred to as lower-level learning by Fiol and Lyles (1985), adaptive learning or coping by Senge (1990), and non-strategic learning by Mason (1993).
- *Double-loop learning (DLL):* Double-loop learning occurs when, in addition to detection and correction of errors, the organization is involved in the questioning and modification of existing norms, procedures, policies, and objectives. DLL involves changing the organization's knowledge-base or firm-specific competencies or routines (Dodgson, 1993). Double-loop learning is also called higher-level learning by Fiol and Lyles (1985), generative learning (or learning to expand an organization's capabilities) by Senge (1990).
- *Deutero-learning:* Deutero-learning occurs when organizations learn how to carry out single-loop and double-loop learning. The first two forms of learning will not occur if the organizations are not aware that learning must occur. Awareness of ignorance motivates learning (Nevis, DiBella, & Gould, 1995). This means identifying the learning orientations or styles, and the processes and structures (facilitating factors) required to promote learning. Nevis et al. (1995) identify seven different learning styles and ten different facilitating factors that influence learning. For example, one of the facilitating factors is identifying the performance gap between targeted outcomes and actual performance. This awareness makes the organization recognize that learning needs to occur and that the appropriate environment and processes need to

be created. This also means recognizing the fact that lengthy periods of positive feedback or good communication can block learning (Argyris, 1994).

Double-loop and deuterio learning are concerned with the why and how to change the organization while single-loop learning is concerned with accepting change without questioning underlying assumptions and core beliefs. Dodgson (1993) states that type of organizational learning also depends on where in the organization learning occurs. Thus, learning can occur in different functions of the organization such as research, development, design, engineering, manufacturing, marketing, administration, and sales.

Different scholars have pointed out there is no one best style for an organization to learn. It all depends on the environment in which the organization is embedded. Fiol and Lyles (1985) point to the advantages of single-loop learning in stable, more predictable environments. Senge (1990) indicates that in uncertain environments, characterized by discontinuous change, double-loop learning may be the most appropriate organizational learning style. While single-loop learning occurs in a number of organizations, very few organizations experience double-loop learning or deuterio learning. This is due to the fact that organizational members resort to defensive reasoning tactics in order to "avoid vulnerability, risk, embarrassment, and the appearance of incompetence" (Argyris, 1994). Double-loop learning is required in such situations to bridge the gap between theory and practice

4) Senge's (1990) fifth discipline model

According to Senge (1990) learning organizations are "...organizations where people continually expand their capacity 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 to see the whole together". The basic rationale for such organizations is that in situations of rapid change only those that are flexible, adaptive and productive will excel. For this to

happen, it has been argued that organizations need to “discover how to tap people’s commitment and capacity to learn at all levels”.

Senge argues that, for a “learning organization it is not enough to survive”. “Survival learning” or what is more often termed “adaptive learning” is important as well as necessary. But for a learning organization, “adaptive learning” must be joined by “generative learning”, “learning that enhances our capacity to create” (Senge, 1990).

The dimension that distinguishes learning from more traditional organizations is the mastery of certain basic disciplines or “component technologies”. The five disciplines that Senge identifies are said to be converging to innovate learning organizations. They are:

- *Personal Mastery*: “Organizations learn only through individuals who learn. Individual learning does not guarantee organizational learning. But without it no organizational learning occurs” (Senge, 1990). Personal mastery is the discipline of “continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively”. This discipline of aspiration involves formulating a coherent picture of the results people most desire to gain as individuals (their personal vision), alongside a realistic assessment of the current state of their lives today (their current reality). People with a high level of personal mastery live in a continual learning mode. Personal mastery is not something one possesses. It is a process. It is a lifelong discipline. People with a high level of personal mastery are acutely aware of their ignorance, their incompetence, and their growth areas and they are deeply self-confident (Senge, 1990).
- *Mental Models*: These are “deeply ingrained assumptions, generalizations, or even pictures and images that influence how we understand the world and how we take action” (Senge, 1990). This discipline of reflection and inquiry skills is focused around developing awareness of the attitudes and perceptions that influence

thought and interaction. By continually reflecting upon, talking about, and reconsidering these internal pictures of the world, people can gain more capability in governing their actions and decisions. If organizations are to develop a capacity to work with mental models then it will be necessary for people to learn new skills and develop new orientations, and it also entails institutional changes that foster such change. “Entrenched mental models... thwart changes that could come from systems thinking” (Senge, 1990). Taking the organization in the right direction also requires working to overcome the sorts of internal politics and game playing that dominates traditional organizations. In other words it means fostering openness (Senge, 1990).

- *Shared Vision*: This collective discipline establishes a focus on mutual purpose. People learn to nourish a sense of commitment in a group or organization by developing shared images of the future they seek to create and the principles and guiding practices by which they hope to get there. In mastering this discipline, leaders learn the counter-productiveness of trying to dictate a vision, no matter how heartfelt (Senge, 1990). Visions spread because of a reinforcing process. Increased clarity, enthusiasm and commitment reinforce other members in the organization.
- *Team Learning*: This is a discipline of group interaction. It builds on personal mastery and shared vision – but these are not enough. People need to be able to act together. Through techniques like dialogue and skillful discussion, teams transform their collective thinking, learning to mobilize their energies and ability that is greater than the sum of individual members’ talents. It also involves learning how to recognize the patterns of interaction in teams that undermine learning (Senge, 1990). When teams learn together, Senge suggests, not only can there be good results for the organization members; it will grow more rapidly than could have occurred otherwise.
- *Systems Thinking*: In this discipline, people learn to better understand interdependency and change, and thereby to deal more effectively with the forces that shape the consequences of our actions. Systems thinking is based upon a

growing body of theory about the behavior of feedback and complexity – the innate tendencies of a system that lead to growth or stability over time.

According to Senge (1990), organizations learn best from their experience, but rarely experience directly the consequences of many of the important decisions that they make. One tends to think that cause and effect will be relatively near to one another and so when faced with a problem one tends to search for ‘solutions’ that are close by. Generally one tends to look for solutions that produce improvements in a relatively short period of time. However, when viewed in systems terms, short-term improvements often involve very significant long-term costs. The systems viewpoint is generally oriented toward the long-term view (Senge, 1990).

5) Lipshitz, Popper and Friedman’s (2002) multifacet model of organizational learning

This model takes into account five “facets” of organizational learning that capture the factors that influence organizational learning. The five facets are 1) *Structural facet* which describes the kind of organizational arrangements necessary for attributing learning to organizations and they have termed these arrangements as organizational learning mechanisms, that is, observable organizational subsystems in which organization members interact for the purpose of learning. 2) *Cultural facet* identifies five norms that are likely to produce valid information and a commitment to corrective action: transparency, integrity, issue orientation, inquiry, and accountability. These norms are the observed manifestations of a set of shared values that constitute an organizational culture conducive to productive learning. 3) *Psychological facet* - this comprise of two psychological states that are required for productive learning. The first state is psychological safety, without which people are reluctant to take the risks required for learning. The second is organizational commitment, without which they are reluctant to share information and knowledge with others. A sense of psychological safety makes people feel safe to make errors and honestly discuss what they think and how they feel. 4) *Policy facet* - this denotes the formal and informal steps taken by management to promote organizational

learning. This facet receives concrete expression through an organization's policies, rules, budgets, procedures, etc., and 5) *Contextual facet* - this focuses on the exogenous factors that at best are under management's indirect control or at worst are not under its control at all. This includes factors like error criticality, environmental uncertainty, task structure, proximity to core mission and committed leadership.

As evident from the models described above, different researchers have given different models of organizational learning. *However, the questions arise as to 1) whether there is any commonality among these models, 2) if yes, then where is the point of departure among the different models, 3) if not, then which is the best model that encompasses all the aspects of organizational learning, 4) finally which of these models can best be used by managers and consultants as a guide for building learning organization?*

Similarities and Differences among the Models of Organizational Learning

It has been observed that there are certain similarities and differences among the models. Most of the models have talked about the different levels at which learning takes place, beginning with the individual and then moving on to groups/teams (Crossan et al., 1999; Senge, 1990a), departments, plants (Shrivastava, 1983) and finally organization. However, these models have also made the distinction between individual learning and organizational learning (Crossan et al., 1999; Lipshitz et al., 2002, Shrivastava, 1983) by stating that the later is more than the sum of individual learning and it exist independent of individual members of the organization. Different labels have been given to similar concepts, for example, double-loop learning (Argyris & Schon, 1978) is called generative learning (or learning to expand an organization's capabilities) by Senge (1990a) and single-loop learning has been referred to as adaptive learning or coping. Both Shrivastava and Senge have given system perspective models of organizational learning. It can be seen that some of these models have talked about culture prevalent in the organizations and its role in fostering the learning process. For example, in the 4I framework, Crossan et al. (1999) talked about the process of institutionalization in

which actions that are deemed to be effective will be repeated and eventually, the workgroup will establish formal rules, procedures, and routines become embedded (Crossan et al., 1999). Shrivastava (1983) has also made a reference to culture in his mythological learning system where the myths provide the basis for norms and shared values and they influence the development of organizational cultures. While Lipshitz et al. (2002) has described in the cultural facet about the five norms that are likely to produce valid information and a commitment to corrective action: transparency, integrity, issue orientation, inquiry, and accountability

One of the most comprehensive theoretical models among these models is the 4I framework of organizational learning given by Crossan et al. (1999) because it takes into account all the different levels at which learning takes place that is, individual, group, and organization and the processes which occur at these levels such as intuiting, interpreting, integrating, and institutionalizing. This model also sees organizational learning as a dynamic process where learning occurs not only over time and across levels, but it also creates a tension between assimilating new learning (feed forward) and exploiting or using what has already been learned (feedback) which further generates the process of learning and paves the way for continuous learning process that helps in the effective functioning of the organization. However among these models, the model, which has tried to bridge the gap between theory and application, by providing research-based guidelines for managers wishing to implement organizational learning processes in the organization and promote it, is the *multifacet model of organizational learning* by Lipshitz et al. (2002).

As indicated by some of the researchers, considering the diversity of disciplines from which organizational learning is being studied (Easterby-Smith, 1997), the formation of a perfect model probably is not possible. However, an organization of the body of theories of organizational learning that takes into account its multifaceted nature and which integrates at least some of its wide and diverse literature will be of help to both researchers and practitioners. These gaps

have been addressed by this multifacet model of organizational learning of Lipshitz et al., (2002). They have also stated that it is not possible to have causal relationships among all the facets rather the model represents an ideal framework whereby each positive link in the framework increases the likelihood of organizational learning. Different organizations, operating under different situations and environments, can manage to learn productively by taking into account different permutations and combinations of the facets in the model because the means to productive learning adopted by one organization or even a unit of the same organization, cannot simply be reproduced somewhere else (Lipshitz et al., 2002). This further implies that in order to have a better understanding of the organizational learning process one needs to explore more about the differences in the organizational learning processes across different organizations and the factors that are responsible for these differences. Moreover many researchers (Shrivastava, 1983; Lipshitz et al., 2002) have argued for the need to conduct empirical studies in order to explore this aspect of organizational learning.

Differences in Organizational Learning Processes

It is assumed that all organizations have learning capability and they differ from each other in the 'way' and 'what' to learn (Mehra & Dhawan, 2003). Different researchers have pointed out there is no one best style for an organization to learn and it all depends on the environment in which the organization is embedded and criticality of the situation which it faces (Fiol & Lyles, 1985; Senge, 1990a; Edmondson and Moingeon, 1996; Lipshitz et al., 2002; Ellis and Sphielberg, 2003). Fiol and Lyles (1985) also point to the advantages of single-loop learning in stable, more predicable environments. Senge (1990) indicates that in uncertain environments, characterized by discontinuous change, double-loop learning may be the most appropriate organizational learning style. It has been found in a study by Ellis and Shpielberg (2003) that there are negative relations between perceived environmental uncertainty and the intensity of using each of the organizational learning mechanisms (formal learning processes, information dissemination, training,

information gathering, information storage and retrieval). That is, the greater the intensity of using organizational learning mechanisms, the lower the managers' feelings of uncertainty. These negative correlations were higher in the organizations that functioned under uncertain as opposed to certain environments. Gupta and Thomas (2001) cite the case study of the practices of FCF Company to show how and why, due to its risk-averse culture, it favors exploitation over exploration. This bias helps FCF achieve incremental performance improvement but it also limits the possibility to dramatically increase performance. This exploitation tendency is partly explained by the fact that FCF operates in a heavily regulated commercial nuclear fuel industry where significant innovation is both costly and risky (Gupta and Thomas, 2001).

Organizational Learning and its Relationship with Some Contextual Variables

One can better understand a definite framework of organizational learning after exploring and delving into the different aspects of organizational learning and the factors that affect organizational learning process as has been stated in the multifaceted model by Lipshitz et al., (2002). Various researchers (Dodgson, 1993; Fiol & Lyles, 1985) state that learning is stimulated by both external factors (environmental changes) as well as internal factors (individuals, leaders, culture, structure, strategy, etc.) in a complex and iterative manner. The focus of the present research work is to study the impact of internal factors on organizational learning as these factors are deemed more crucial to initiate the process of organizational learning in organizations as compared to the external factors. Therefore, the researcher has tried to formulate a framework of organizational learning taking into consideration internal factors such as leadership, organizational culture and strategy. These three internal factors play the most critical roles in initiating and facilitating organizational learning and their importance has been highlighted in the following section of the review of literature.

Organizational Learning and Leadership

Leadership is considered to be an inherent component of organizations, one that defines direction and shapes control and autonomy within them (Child and Heavens, 2001). Leaders play the most crucial role for initiating and instituting organizational learning in the organization (Ellis, Caridi, Lipshitz & Popper, 1999; Popper & Lipshitz, 2000). It is an important agency for organizational learning (Sadler, 2001). Leadership is often required in order to change the existing thinking and practice present in the organization for learning to take place. The passages below provide a brief overview of the concept of leadership and its theories.

Leadership is the process of influencing the potential behaviour of people to get the job done effectively over a sustained period of time. The leaders try to influence the subordinates through the use of basically three types of influence patterns, namely, compliance, identification and internalization. However, power and authority are necessary to be effective leaders. According to French and Raven (1959), individuals can use five different bases of power depending upon how they position their relationship with others. These are reward power, coercive power, legitimate power, referent power and expert power.

A large number of researches have been conducted in the field of leadership and various theories have been propounded by various scholars. The earliest theory of leadership is the "Great Man" theory and later identified as the Trait theory of leadership which focused on individual traits that were expected to differentiate leaders from non-leaders. Then the era of Behavioural theories of leadership were ushered in, which started in the late 1930s with the works of Lippitt, White and Lewin from the Group Research Centre in Iowa and the Ohio State University researchers. The former studied the effects of three leadership styles – autocratic, democratic and *laissez-faire* while the latter proposed two dimensions of leadership behaviour – consideration and initiating structure. Similar dimensions of leadership were also found by Michigan group of researchers. These theories basically tried to study the

influences of leaders' work styles and behaviours (Yi Wu, 2009). This was followed by the Contingency theory era from early 1960s when scholars formulated theories that gave due attention to the interaction between behaviours and environments of leaders and followers and the environmental conditions suitable for various styles of leadership. Then, new leadership approaches were proposed which classify leadership styles as transformational, transactional and laissez-faire (Bass & Avolio, 1990). This classification is based on the work of Burns (1978) as well as on prior classifications, such as relations-oriented versus task-oriented leadership (Fiedler, 1967). "In addition, transactional leadership follows House and Mitchell's (1974) path-goal theory quite closely. And models of charismatic, inspirational, or visionary leadership (House & Shamir, 1993; Westley & Mintzberg, 1989) present many similarities to transformational leadership" (Vera & Crossan, 2004).

Bass (1985) defines transformational leadership in terms of the leader's motivational effect on followers. The followers feel loyalty, trust, admiration and respect toward the transformational leader and it comprise of five characteristics, namely, Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation and Individualized Consideration. Transactional leadership, in contrast, seeks to motivate followers by appealing to their own self-interest. Its principles are to motivate by the exchange process and this style comprises of three behaviours, namely, Contingent Reward, Management-by-Exception (Active) and Management-by-Exception (Passive). Laissez-faire is the avoidance or absence of leadership, and is the most inactive style.

Though it has been assumed that leaders can directly influence collective learning by what they say and do and they can also indirectly affect it by creating cultures, systems and structures (Kavanagh & Ashkanasy, 2006). However, to date, there is limited systematic research directly linking leadership and learning (Berson, Nemanich, Waldman, Galvin & Keller, 2006; Popper & Lipshitz, 2000). Some attempts have been made to deal with this subject (Edmondson, 1999; Davenport & Prusak, 1998; Lipshitz et al., 2002; Schein, 1993; Senge, 1990b), mostly at the conceptual level.

For example, theoretical work by Vera and Crossan (2004) systematically linked strategic leadership and organizational learning. A few studies have, however, examined leadership roles in learning in certain settings such as hospitals, and community clinics (e.g., Amitay et al., 2005; Edmondson, 1999; Popper & Lipshitz, 2000). These empirical works are very few at this point of time, and they deal with a very small and selective number of leadership and organizational learning variables. Additional aspects of leadership that is conducive to organizational learning have yet to be analyzed and empirically investigated (Amitay et al., 2005). Therefore, the researcher has raised certain questions in this regard which are –

- a) *What are the different leadership styles or combination of different styles that facilitate organizational learning?*
- b) *What is the impact of top management leadership style on organizational learning?*

From review of literature, the above stated questions are partly answered. Positing transformational and transactional leadership as strategic approaches, Vera and Crossan (2004) suggested that both transformational and transactional leaders stimulate exploration and exploitation, yet transformational leaders usually inspire learning that challenges the status quo, and transactional leaders facilitate learning that reinforces existing practices. Llorens-Montes, Moreno and Morales (2005) found that ‘support leadership’ encourages teamwork cohesion, organizational learning and technical and administrative innovation, which in turn helps to improve profits of the company and obtain competitive advantages. This finding is supported by other studies (Senge, 1990b; Senge, Roberts, Ross, Smith & Kleiner, 1994). Tushman and Nadler (1986) stated that to promote organizational learning and innovation, a transformational leadership is needed that will tackle the ‘intellectual-capital-based’ new economy. There are also other similar findings regarding the relationship between organizational learning and transformational leadership such as that of Tichy and Devanna (1986) and Coad and Berry (1998). Amitay et al. (2005) found high positive correlation between transformational leadership and all the dimensions of

organizational learning (formal learning processes, knowledge dissemination, worker training, information gathering and information preserving) whereas negative correlations were found between transactional leadership and all the dimensions of organizational learning. Organizational learning, therefore, needs strong commitment and support from the management (Lei, Slocum & Pitts, 1999; Swieringa & Wierdsma, 1992). It can, thus, be seen that most of the studies cited here focused on the impact and the important role played by transformational leadership in instituting and facilitating organizational learning.

There are, however, some critiques of transformational leadership. Nicoll (1986), for example, argued that the 'hero' or 'savior' leader is largely mythical. This myth places a huge burden on the leaders and this also implies a passive role of the followers and causes to underestimate the importance of the interactive aspects of leader-follower relations. Moreover, transformational leadership is commonly linked with the roles at the top rung of the organization. But in practice many others at all organizational levels can and do contribute to the process of creating a sense of common purpose (Sayles, 1993; Senge, 1996). Collins and Porras (1995) concluded, that "a high profile, charismatic style is absolutely not required to successfully shape a visionary company". Such contentions are partly absolved by the contingent view of leadership with regard to organizational learning given by Vera and Crossan (2004). In times of stability, organizational learning processes helps to refine and work on current learning which in a way is more focussed on the exploitation of the current reserve of knowledge - a task best suited to transactional leadership. And in times of change, there arises the need to alter the firm's institutionalized learning and focus on exploration of new resources- a task best suited to transformational leadership. More accurately, every organization faces the challenges of both change and stability (Tushman & O'Reilly, 1996). An ideal strategic leader would be able to identify and decide the leadership behaviors which are appropriate for the circumstances. Shamir (1995), for example, notes that by consistently honoring transactional agreements, CEOs build trust, dependability, and an image of

consistency among organizational members. This contributes to high level of trust and respect associated with transformational leaders.

Still, studies on organizational learning and leadership are limited. Therefore, there is the need to explore, at the empirical level, which leadership style or combination of leadership styles can best address the role of leadership in facilitating the organizational learning process in organizations and also to further study the impact of these relationships on firm performance (Vera & Crossan, 2004).

Organizational Learning and Organizational Culture

In the context of organizational learning, culture has been stated as one of the factors that facilitate this learning (DeLong & Fahey, 2000; Fiol & Lyles, 1985; Hedberg, 1981; Schein, 1985). DeLong and Fahey (2000) argued that culture shapes the assumptions about which knowledge is important and how knowledge is to be distributed between the organization and the individuals in it. This helps in the functioning of the organization. It is also recognized as a key component of knowledge management and organizational learning (DeLong & Fahey, 2000).

An organization's culture manifests itself in the overriding ideologies and established patterns of behavior (Martin, 1982; Schein, 1983). It has been defined as a) a pattern of basic assumptions, b) invented, discovered, or developed by a given group, c) as it learns to cope with its problems of external adaptation and internal integration, d) that has worked well enough to be considered valid and, therefore e) is to be taught to new members as the f) the correct way to perceive, think, and feel in relation to those problems (Schein, 1990). Thus, it is a learned product of group experience which helps the organizational members to successfully meet the demands of the environment in which the organizations operate. Moreover, for organizational culture to function effectively as a managerial control mechanism, the organizational culture and the formal organizational structure must be harmoniously interrelated (Worley, Hitchin & Ross, 1996) as well as aligned with the demands and

predispositions of the external environment in which it functions (Kampas, 2003). Thus organizational culture, in addition to the capability to integrate daily activities of employees to reach the planned goals, can also help organizations to adapt well to the external environment for rapid and appropriate response (Daft, 2001), which is a very important characteristic of organizational learning.

Organizational culture is also significantly influenced by national culture (Hofstede, 2001). Hofstede (1991) has argued that organizational systems work best when their design is consistent with the underlying values and culture of the society in which they function. He gave the following dimensions of national culture -

- 1) *Power distance* - the extent to which a society accepts the fact that power in organizations is distributed unequally.
- 2) *Uncertainty avoidance* - the extent to which a society feels threatened by uncertain and ambiguous situations and tries to avoid these by establishing rules and believing in absolute truth.
- 3) *Individualism versus collectivism* - the extent to which people see themselves as a member of the group. Members in cultures that are high on individualism place much emphasis on individual initiative and achievement. Those high on collectivism consider other's interest.
- 4) *Masculinity versus femininity* - the extent to which the dominant values in society is masculine (e.g. strong tendency to perform, achieve, make money, show off, assertive and consider big as beautiful) or feminine (e.g. not to show off, pay attention to quality of life rather than making money etc.).
- 5) *Long versus short-term orientation* - this fifth dimension of national culture is independent of the four stated above. Long-term orientation stands for the fostering of virtues oriented towards future rewards, in particular, perseverance and thrift. Its opposite pole, short-term orientation, stands for the fostering of virtues related to the past and present, in particular, respect for tradition, and fulfilling social obligations.

When the organizational culture and structure are in harmony with the predispositions and demands of the national culture (Hofstede, 2001), then that organization is assumed to be a fast learning organization. Organizations need to adapt to changing environments, draw lessons from past success and failures, detect and correct errors of the past, anticipate and respond to imminent uncertainty and realize images of a desirable future (Argyris & Schon, 1996).

In conjunction to the earlier discussion on the relationship of leadership with organizational learning, there has always been a reference to the role of leadership in creating an atmosphere of openness and psychological safety, which is regarded as a crucial factor for effective organizational learning to occur (Argyris & Schon, 1996; Edmondson, 1999; Schein, 1993). Amitay et al. (2005) argued that the existence of organizational learning mechanisms cannot in itself account for productive organizational learning, which is learning that produces beneficial outcomes for the organization. Such learning mechanisms must be embedded in an appropriate “learning culture”. This mainly implies the importance of the culture that helps in facilitating organizational learning.

It can be seen that different authors have stated that cultures and values facilitate organizational learning and this shows the importance of culture in fostering organizational learning. Therefore, the researcher has raised certain questions in this regard in order to consolidate and construct a concrete body of the relationship between organizational culture and organizational learning, which are –

- a) *Are there certain kinds of culture that are prerequisite for organizational learning?*
- b) *Which kind of culture promotes learning that is beneficial to the organization?*

An attempt has been made to answer these questions from a review of literature. Based on empirical grounds, Schein (1994) identified the cultural characteristics of systems in which individuals, groups or organizations seem to be

more able to learn continuously. Seven elements appear to characterize a culture supportive of perpetual learning. Some of them are -- an equal concern for all of the organization's stakeholders (customers, employees, suppliers, community, stockholders) as they all can slow down and destroy the organization, a belief that people can and will learn, a shared commitment to open and extensive communication, shared commitment to teamwork, etc. However, Schein points out that an organizational culture cannot be created and modified easily, as culture is about shared mental models. Popper & Lipshitz (2000) and Amitay et al., (2005) have stated that organizational learning is likely to be productive if the organization's learning mechanisms are embedded in a culture of learning. They have posited a hierarchy of five values which fosters organizational learning. Situated at the apex of the hierarchy is continuous learning, which in turn requires valid information, transparency, issue orientation, and accountability. It has also been found that cultures that support learning create an atmosphere of trust where knowledge and opinions can be shared openly without fear of punishment (Gillespie & Mann, 2000; Pillai, Schriesheim & Williams, 1999). Von Krogh (1998) stated that learning culture is where there is care in the workplace. McGill and Slocum (1993) stated that organizations that actively build learning cultures are characterized by clear and consistent communication, openness to experience, encouragement for responsible risk taking and willingness to acknowledge failure and learn from it. Except for few empirical studies (Amitay et al., 2005; Chang & Lee, 2007; Schein, 1994), most of the literatures exploring the link between organizational learning and organizational culture are theoretical in nature. Therefore, there is a need to conduct more empirical studies in this regard in order to strengthen their relationship.

Organizational Learning and Strategy

Strategy refers to “a plan for interacting with the competitive environments to achieve organizational goals” (Daft, 1995). It was proposed by Daft and Weick (1985) that strategy influences the openness of organizations to learning as well as the kind of information it acquires. It also influences learning by providing a

boundary to decision-making and a context for the perception and interpretation of the environment (Chandler, 1982; Cyert & March, 1983; Daft & Weick, 1984). Similarly, the strategic options chosen depend on the learning capacity of the organization. Therefore, organizational learning ability is also likely to influence the kind of strategic options that will be chosen by an organization. This finds some support in the empirically based analysis of Pavitt (1991), who argues that strategies of large innovative firms are determined in part by attempts to learn in highly uncertain conditions. Thus it can be seen that strategy has a circular relationship with learning (Fiol & Lyles, 1985).

Strategic planning is widely accepted as central to organization's survival (Kenny, 2006) as modern organizations operate in very uncertain and challenging environment where there is continuous demand of globalization, rapid technological change and increasing competitiveness. In order to ensure long-term sustainability, organizations have to develop appropriate strategic plans to deal effectively with such volatile environment. Such kind of strategic plan calls for managers who can establish a culture of trust, encourage participation and support individuals to learn from their experience and to contribute in return, their practice based knowledge to formation of better strategic outcomes (Kenny, 2006). This implies the important role played by leaders in adopting specific strategy for the organizations, which contribute to firms' success. Therefore the authors have raised the following questions-

- a) *What is the role of business strategies in the effective implementation of organizational learning process in an organization?*

Literature review shows that strategy is one of the “core” elements that is essential for effective implementation of organizational learning (Fiol & Lyles, 1985; Francis, 1997). A dynamic strategy, incorporating a clear vision of the goals and, which emerges as the environment creates change in the organization is such an essential component (Francis, 1997). James (2003) have stated that there are different

kinds of strategic planning, some of which are more conducive to learning, like “emergent learning” that facilitate innovation and exploration, while other strategies may help “deliberate learning” which may be more conducive to exploitation learning as this type of learning relies on goals that are more stable. It depends on the demand of the situation what type of strategic planning the leader adopts in order to facilitate the learning process in the organization. Moreover, for knowledge to become the source of competitive advantage, organizations need to match their learning process in the organizations with their business strategy (Sabherwal & Sabherwal, 2007).

One of the most popular typologies of business strategy is that of Miles and Snow's (1978), namely, defender, prospector and analyzer strategy. These strategic decisions, all outputs of learning, are what shape ongoing learning in the organization (Vera & Crossan, 2004). A prospector strategy is likely to promote in individuals the desire for new challenges and opportunities, along with the habit of flexibility when acquiring new learning and therefore fosters innovation and creativity. In contrast, a defender strategy is likely to promote risk aversion in individuals and to create incentives to achieve efficiency in order to maintain a stable position. Analyzer strategy shares some of the characteristics of both the aforementioned strategies. It tries to simultaneously minimize risks and maximize growth opportunities (Miles & Snow, 1978).

Very few researches have tried to explore the relationship between the different business strategies and organizational learning and literature review revealed more of conceptual propositions (Fiol & Lyles, 1985; Ribbens, 1997; Vera & Crossan, 2004). Therefore, there is still need for empirical study to explore the link between organizational learning and business strategy.

Impact of Organizational Learning on the Performance of Organization

The emerging literatures of learning organization assume that learning will improve organizational performance (DeGues, 1988; Garvin, 1993). It is important to study the effect of organizational learning on the performance and success of the organization because learning is seen as a purposive quest to retain and improve competitiveness, productivity, and innovativeness in uncertain technological and market situations (Balasubramanian, 1995). Therefore, in order to survive in the global competitive environment, organizations have to transform themselves into learning organization (Venugopal & Beats, 1995). Chakravarthy (1986) proposes that useful measures of organizational performance are ones that help assess the quality of a firm's adaptation. Brown and Laverick (1994) further add that useful measures of organizational performance should enable to distinguish between successful and unsuccessful implementation of business strategy.

There are very few studies that clarify how the learning organization concept works to achieve performance improvement (Goh & Richards, 1997; Henderson, 1997; Jacobs, 1995; Kaiser & Holton, 1998). As far as organizational learning and performance is concerned, Crossan and Hlland (2001) and Bontis et al. (2002) tested empirically and found that there is positive relationship between the stocks of learning at all levels and business performance. Similarly, Ellinger, Ellinger, Yang and Howton, (2003) have also established a link between financial indicators of performance and organizational learning through empirical research. Ellinger et al. (2002) findings in an "exploratory research suggests a positive association between learning organization practices and firms' financial performance. These findings also lend credence to the existence of a business case for embracing learning organization practices".

However, there is little agreement on how organizational performance should be measured (Cameron & Whetten, 1983) and no one criterion or set of criteria dominates. The outcome variables selected mostly reflect the preferences of the

researchers involved (Brews & Hunt, 1999). Though, the most widely available information source about organization's performance is financial information (Jashapara, 2003). However, recently, questions have been raised regarding the "accuracy of the accounting protocols used to create financial data in the wake of corporate scandals such as Enron" (Guest, Michie, Conway & Sheehan, 2003). Therefore, it is more practical to use both subjective as well as objective measure of performance as has been used by Milia and Kamal (2009).

In the present research, the researcher proposes to use an indirect measure of performance of organization, that is, job satisfaction. Job satisfaction is one of the most studied variables in the field of industrial and organizational psychology (Spector, Brannick & Chen, 1997). It has been observed to be one of the major determinants of organizational performance (Riketta, 2002) and effectiveness (Laschinger, 2001). It has been observed in some studies that a large part of the job satisfaction was attributed to the availability of learning opportunities on the job (Rowden, 2002; Rowden & Ahmed, 2000). Therefore the researcher has put forth the following question –

a) *What is the impact of organizational learning on job satisfaction?*

Job satisfaction can be defined as an assemblage of attitudes about various aspects or facets of the job (Spector, 1997). As a multifaceted construct, it includes both intrinsic and extrinsic elements of the job (Howard & Frick, 1996; Warr, Cook & Wall, 1979) as well as social satisfaction (Schnake, 1983). It provides an indication of an employee's well-being induced by the job (Michaelowa, 2002). Organizations that have prioritized learning and development have found increases in employees' job satisfaction, productivity, and profitability (Watkins & Marsick, 2003). Although some studies assume positive effect of organizational learning on firm performance (Ellinger et al., 2002; Bontis et al., 2002), very few researches have provided empirical evidence of its positive links with employee attitudes such as job satisfaction (Chiva & Alegre, 2009). Therefore, there is a need to explore more about the relationship

between these two constructs. Hence, in the present research, attempt has been made to explore the impact of organizational learning on job satisfaction.

Consolidation of a Framework of Organizational Learning

It can thus be concluded that in a global marketplace characterized by increasing technological complexity, political instability, and social diversity, organizations are finding their competitive edge in the development of more flexible, high involvement work cultures and in the creation of a new kind of leadership that can provide continuity and direction in the midst of ongoing innovation and adaptation (Schein, 1985; Shamir, 1999; Vandenberg, Richardson & Eastman, 1999). However, little attention is given to the role of culture in shaping the progress of learning (Hong, 1999) and there are very few empirical studies that have tried to explore these encompassing relationships. Therefore, the researcher has propagated a framework that encompasses all the aspects discussed above. This framework consists of studying the effect of leadership, the main independent variable, on organizational learning, which is the main dependent variable, with organizational culture as moderating variable. Business strategy has also been taken as one of variables in this study and in this case impact will be analyzed in terms of moderating effect. It is assumed that organizational culture will act as a moderator in facilitating organizational learning in organizations because it has been observed that certain amount of learning will be taking place in organizations, however, such learning may be enhanced by the presence of certain conducive organizational culture characterized by high degree of commitment, trust and respect for all individuals, teamwork, empowerment, psychological safety, etc. (Gupta, Iyer & Aronson, 2000; Perez Lopez, Montes Peon & Vazquez Ordas, 2004; Popper & Lipshitz, 2000;) while certain other culture such as those low on trust and discourage open and frank exchanges between levels in the hierarchy, etc., may act as deterrent (DeLong & Fahey, 2000; Schien, 1991). It is also imperative to study the impact of all these variables on the performance of the organization as it has already been assumed that

organizational learning helps an organization to adapt to the changing environment and further helps in the effective and successful functioning of an organization.

Organizational Learning, Leadership, Strategy and Organizational Culture -- The Link

Many writers, including the authors of some of the most famous books on organizations, such as *Organizational Culture and Leadership* (Schein, 1985), *In Search of Excellence* (Peters & Waterman, 1982) and several others have described at length the influence of leaders on the formation of organizational values. Leaders create a clear and compelling vision about the goals of the organization that transforms the industries and the way companies do business (James, 2003). Leaders can design the strategic layout of the firm and shape up the organizational culture through various affairs, actions and services. However, it also depends on the demand of the situation what type of strategic planning the leader adopts in order to facilitate the learning process in the organization. Through all these different ways, leadership in conjunction with strategic planning actually affects the organizational learning process (Lipshitz & Popper, 2000). While there is a large body of research that has explored leadership and organizational culture independently, the interconnection between these constructs (Block, 2003) and organizational learning remains more of an implicit theory than an empirical finding. There are only few studies like Amitay et al. (2005) and Chang and Lee (2007) which found that leadership, especially transformational leadership, and organizational culture have significant positive effect on the operation of learning organization. Therefore the researcher suggests for the need to conduct more empirical study using the framework presented in Figure 1.

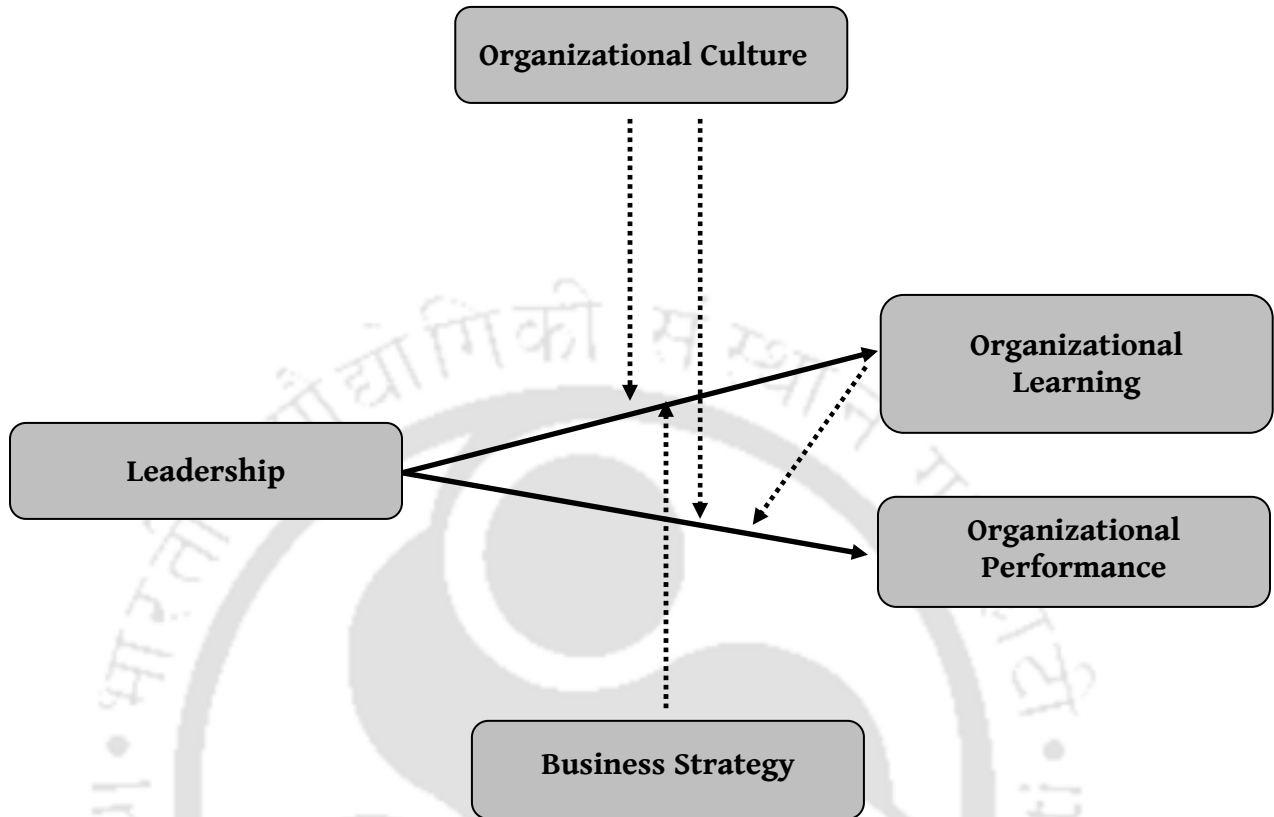


Figure 1: Proposed relationship among variables
(broken line indicates moderating effect)

Thus the concept of organizational learning has come to full circle beginning with the conceptualization and finally its impact on the performance of organization. It can be observed that “organizational learning is not a single process performed by an entire organization in a fashion; rather it is an assemblage of loosely linked subprocesses ... and in which different organizational units participate in different ways and at different levels of intensity” (Lipshitz & Popper, 2000). This process is affected by different contextual factors such as culture, strategy, leadership and they have different roles to play.

The present competitive environment which is created due to globalization and the ever-changing technology, places the onus of being labeled as a successful

organization on the ability of the organization to adapt and innovate with spontaneity. This can be achieved when the organizations adopt organizational learning mechanisms which will contribute to creating knowledge base and core competency. Therefore, this model, in a way, will extend invaluable information to practitioners as well as researchers, by proposing a consolidated framework encompassing the important factors such as leadership, organizational culture and strategy which play dominant roles in initiating and implementing organizational learning. It has tried to highlight the crucial role that different styles or combination of the different styles of leadership plays in creating the right culture where there is psychological safety, trust and care in the organization which will foster organizational learning. However in this endeavour, business strategy also plays a critical role as the strategy adopted by the top management decides what type of organizational learning will be fostered in the organization. For example, if an organization adopts a prospector type of strategy (Miles & Snow, 1978) which is future-oriented, then the organization will concentrate more on exploration than exploitation of the current reserve of knowledge. Consequently, if the management becomes aware of the critical role played by each factor, then they would be able to guide the organizations in becoming a learning organization, which can take them towards the path of success, especially for the knowledge-driven industry.

Plan of the Thesis

The thesis has been organized in five chapters.

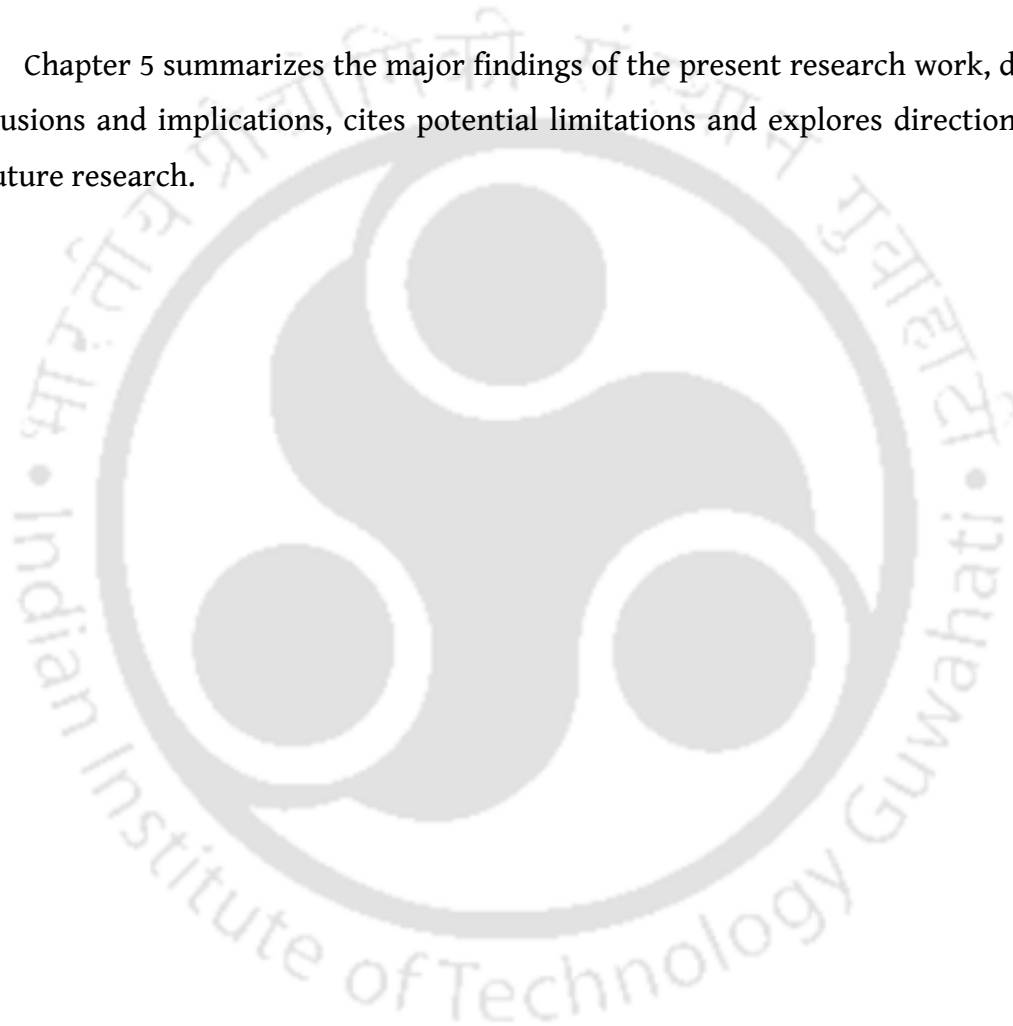
Chapter 1 deals with the meaning, importance and various models of organizational learning and its relationship with contextual variables, such as leadership, organizational culture and business strategy. Also, this chapter makes an attempt to delineate the finer points related to the impact of organizational learning on the success of the organization. In addition, it tries to postulate the framework encompassing all these variables.

Chapter 2 reports the first study of the present research work with all the necessary details.

Chapter 3 describes Study 2A and Study 2B of the present research.

Chapter 4 presents general discussion encompassing all the three studies

Chapter 5 summarizes the major findings of the present research work, draws conclusions and implications, cites potential limitations and explores directions for the future research.



Chapter 2

The earlier chapter presented the review of literature in the area of organizational learning and highlighted the gaps in the researches in this field. Consequently, the researcher has postulated a framework by adopting a process-oriented view of organizational learning and encompassing various contextual factors such as leadership, organizational culture and business strategy (which were identified through the review of literature) that might affect organizational learning. This framework also attempts to establish the impact of organizational learning on the successful performance of the organization. However, the first step towards strengthening the concept of organizational learning necessitates the investigation of the differences in organizational learning processes because organizations functioning in different environments adopt different organizational learning processes to remain competitive and also to be successful (Argote, 1999; Ellis & Shpielberg, 2003). Therefore, Study 1 was designed and carried out to explore the differences in organizational learning processes across different organizations as well as its impact on job satisfaction of the employees.

Study 1

In recent years the term 'organizational learning' has appeared increasingly in scientific and nonscientific publications alike. Organizational learning has existed in business world at least since Cangelosi and Dill (1965) discussed this topic over 40 years ago. Lately, popularity has grown dramatically (Crossan & Guatto, 1996). Evidences show that in today's fast changing environment, the only organization that will survive will be learning organization (Manikutty, 2005).

Organizations cannot place themselves in particular strategic positions in an industry and stay there for all time to come but have to evolve and adapt to new situations. This ability to adapt depends on the amount and kind of learning that takes place continuously in the organizations because learning is seen as a purposive

quest to retain and improve competitiveness, productivity, and innovativeness in uncertain technological and market situations (Balasubramanian, 1995). Many leaders of organizations, not just commercial enterprises but also government, health care, and non-profits, have concluded that successful business strategies require them to become more of a learning organization (Karash, 1995). Consequently, now organizational learning is accepted as an essential element to successfully compete in a global marketplace (Prahalad & Hamel, 1990).

Organizational learning has been defined in several different ways because different researchers have approached the subject from different perspectives. Argyris and Schon (1978), two of the early researchers in this field, defined organizational learning as "the detection and correction of error". Whereas, Fiol and Lyles (1985), defined learning as "the process of improving actions through better knowledge and understanding". Dodgson (1993) described organizational learning as "the way firms build, supplement, and organize knowledge and routines around their activities and within their cultures and adapt and develop organizational efficiency by improving the use of the broad skills of their workforces". These definitions state the processes of learning and how the outcomes are achieved. Organizational learning can, therefore, be seen as a dynamic process based on knowledge, which implies moving among the different levels of action, going from the individual to the group level, and then to the organizational level and back again (Crossan, Lane, & White, 1999; Huber, 1991). This process stems from the knowledge acquisition of the individuals and processes with the exchange and integration of this knowledge until a body of collective knowledge is created. It is also the development of insight and integration of past experiences. In short, it is the capability of an organization to adapt to the changing environment (Hedberg, 1981). Although, widespread acceptance of the notion of organizational learning exists, but there is no current consensus regarding a model for organizational learning theory. Following are some of the organizational learning models which have been discussed in Chapter 1 more elaborately -

- a) Argyris and Schon's (1978) three types of organizational learning - single-loop, double-loop and deutero learning. Double-loop and deutero learning are concerned with the why and how to change the organization while single-loop learning is concerned with accepting change without questioning underlying assumptions and core beliefs;
- b) Shrivastava's (1983) organizational learning system model in which he identified six main types of learning systems (the one-man institution, mythological learning systems, information seeking culture, participatory learning systems, formal management systems and bureaucratic learning systems); and
- c) Crossan, Lane and White's (1999) 4I framework of organizational learning which contains four related processes - intuiting, interpreting, integrating and institutionalizing that occur over three levels: individual, group and organization.

It can be seen that different models give different perspectives of organizational learning. Even a consistent definition of organizational learning has been elusive within the literature as evident in the definitions above. Different researchers have approached the subject from different perspectives, leading to more divergence. The primary impediments to the development of organizational learning theory are that inconsistent terminology is used for comparable concepts and that different definitions are used to describe the phenomenon. As a result, there is little integration and cumulative theory (Huber, 1991).

Differences in Organizational Learning processes in different organizations

It is assumed that all organizations have learning capability and they differ from each other in the 'way' and 'what' to learn (Mehra & Dhawan, 2003). For example, the IT sector is a knowledge intensive sector and firms face continuous global competition. In order to remain competitive, firms need to build specific competencies through organizational learning, which follows stepwise processes of building the individual learning into the institutional/organizational knowledge

through group interactions, and ultimately this as institutionalized knowledge becomes the firm specific competence. Researchers have pointed out there is no one best style for an organization to learn. It all depends on the environment in which the organization is embedded. Fiol and Lyles (1985) point to the advantages of single-loop learning in stable, more predictable environments. Senge (1990) indicates that in uncertain environments, characterized by discontinuous change, double-loop learning may be the most appropriate organizational learning style. It has been found in a study by Ellis and Shpielberg (2003) that there are negative relations between perceived uncertainty and the intensity of using each of the organizational learning mechanisms (formal learning processes, information dissemination, training, information gathering, information storage and retrieval). That is, the greater the intensity of using organizational learning mechanisms, the lower the managers' feelings of uncertainty. These negative correlations were higher in the organizations that functioned under uncertain as opposed to certain environments. Most empirical demonstrations of learning within large, bureaucratic organizations involve repetitive work with measurable outcomes and typically focus on structured tasks where manufacturing defects are apparent, statistical techniques are readily applied, etc. (Argote, 1999; Carroll, Rudolph & Hatakenaka, 2002). In contrast, the management of safety in high-hazard industries such as nuclear power or aviation requires the avoidance of accidents which may prove to be fatal. Such organizations develop distinct learning strategies (Weick, Sutcliffe & Obstfeld, 1999) arising from the need to understand complex interdependencies among systems (Perrow, 1984), and avoid both potential catastrophes associated with trial-and-error learning (Weick, 1987) and complacency that can arise from learning only by successes (Sitkin, 1992).

It can be seen that organizations functioning in different environments adopt different organizational learning processes to remain competitive and also to be successful. These differences in the organizational learning, as evident in the researches, necessitates the search for differences in organizational learning in different settings in order to have a better understanding of organizational learning

processes. This brings us to certain research questions such as a) what are the differences in the organizational learning processes adopted by different Indian organizations; and b) what is its relationship with employee attitude like job satisfaction in different Indian organizations. These are the gaps/ unanswered questions, which the researcher will try to answer in the present study.

The Present Study

As discussed above, different researchers have considered organizational learning differently. From a review of literature it was found that different organizations follow different organizational learning processes (Argote, 1999; Ellis & Shpielberg, 2003; Perrow, 1984) but the gap lies as to what are the differences in these processes. The present study, therefore, makes an attempt to study the differences in organizational learning processes across different Indian organizations for example, banking sector and academic institute. Therefore, the following hypothesis has been postulated –

Hypothesis 1 - There will be significant differences in the organizational learning processes across different organizations.

This line of thinking is based on the premise of some earlier findings (e.g., Argote, 1999; Mehra & Dhawan, 2003) which reported that organizations functioning in different environments adopt different organizational learning processes to remain competitive and also to be successful.

Another question which arises from the review of literature is - what is the relationship between these different organizational learning processes and job satisfaction? Though different researchers have assumed the important positive outcomes of organizational learning, but there are only few studies that have tried to conduct empirical study to explore its links with job satisfaction (Chang et al., 2007; Chiva & Alegre, 2009). The researcher has tried to explore whether organizational

learning is related to job satisfaction. It has been observed from the review of literature that organizational learning helps an organization to adapt to the changing external environment (Prahalad & Hamel, 1990; Mehra & Dhawan, 2003; Hedberg, 1981). Johnson and Sohi (2003) found that learning can and do generate positive outcomes for the firm in the form of improved performance. In this line, it can be stated that organizational learning contributes to the job satisfaction of the employees (Awasthy & Gupta, 2004). Hence, the following hypothesis has been framed -

Hypothesis 2 - Organizational learning will have positive relationship with job satisfaction.

Successful adoption of organizational learning processes by an organization also requires involvement of employees and other members of the organization. The existence of top-management support and employee suggestion and reward systems were seen as the effective vehicles spurring employee involvement and responsibility in successful transformation of organizations (Akhilesh & Madan Mohan, 1993). This in turn might affect the satisfaction of the organizational members as they are getting the support of the top bosses and are also being rewarded for their acts.

Method

Sample

The study comprises of two samples. The first sample was drawn from banking sector in Guwahati city of Assam. The data were collected from 57 employees (male = 47 and female = 10) who had the minimum educational qualification of graduation. The mean and SD of the age of the employees and tenure in the present job were $M = 39.67$ years, $SD = 11.41$ and $M = 11.88$ years, $SD = 11.38$, respectively.

The second sample was drawn from an academic institute. The data were

collected from 83 faculty members (male = 77, female = 6) who had the educational qualification of doctorate degree. The mean and SD of the age of the faculty members and tenure in the present job were $M = 36.40$ years, $SD = 5.15$ and $M = 3.87$ years, $SD = 3.13$, respectively. All the respondents were contacted personally and requested to fill the questionnaire, which consisted of measures of organizational learning and job satisfaction.

Measures

The questionnaire consisted of the following measures of organizational learning and job satisfaction. All the items of organizational learning scale are presented in Table 2.1, while job satisfaction scale is presented in the Appendix A (same scale of job satisfaction was used in Study 2A).

Organizational Learning

The non-availability of organizational learning scale prompted the researcher to develop the scale using the dimensions of organizational learning proposed by earlier researchers. It comprised of 24 items that were framed using dimensions drawn from the study by Mehra and Dhawan (2003). This measure included factors like organizational health, opportunities to learn, flexibility/ risk taking, innovativeness and interactions. Another factor, i.e., awareness about organizational learning has also been included.

Respondents were asked to indicate on a 9-point scale (1- strongly disagree; 9- strongly agree), the extent to which they agree or disagree with the statements.

Factor analysis was carried out using varimax rotations after merging both the samples. Though there were significant differences between the two samples on the organizational learning items (15 out of 24 items), however, the samples were merged in the interest to obtain a larger sample.

Factor loading obtained are reported in Table 2.1. It shows the 24 items presented in the questionnaire and their loadings on each of the 4 factors.

Factor 1 consisted of 16 items showing the different processes of organizational learning such as innovativeness, flexibility and risk-taking, opportunity to learn, awareness, interaction and sharing of information among the employees, etc. Thus it was labeled as *Essential Processes of Organizational Learning*.

Factor 2 consisted of 10 items that indicate the different ways in which the members of the organization interact and which gives them the opportunity to learn as well as share knowledge and information. Therefore it was named as *Interaction*.

Factor 3 comprised of 8 items indicating the extent of flexibility of the organization regarding sharing and appreciation of new and creative ideas for the development of the organization, handling of problems related to work faced by members of the organization, etc. Thus it was labeled as *Flexibility*.

Factor 4 included 3 items that show the ability of the organization to come out with innovative products and services, and it was named as *Innovativeness*.

As Table 2.2 presents, Alpha coefficients for organizational learning measure ranged from .73 to .95, which seem to be fairly adequate. All scales are moderately correlated with each other. Descriptive statistics for the organizational learning measure for both the samples is given in Table 2.3.

Job Satisfaction

Job satisfaction is measured through Schnake's (1983) 11 items scale, having 3 dimensions- Social Satisfaction, Extrinsic Satisfaction and Intrinsic Satisfaction. Respondents were asked to respond to these items on a 7-point scale (ranging from 1

- very satisfied to 7 - very dissatisfied) indicating the amount of their satisfaction. Since the rating scale was in opposite direction with relation to other measure in the present study, therefore item scores in this measure were reversed. Similar factors of job satisfaction were also found in the Indian settings in the study by Tripathi and Tripathi (2001). Alpha values for the job satisfaction scale ranged from .64 to .79, which is quite satisfactory.

Descriptive statistics for the job satisfaction scale for both the samples is given in Table 2.4.

Results and Discussion

As indicated earlier, this study was conducted on two different samples, namely, banking sector and academic institute. One of the prime objectives of this study was to investigate the differences in organizational learning processes across different organizations.

In order to study the differences in the organizational learning processes in these two samples, an ANOVA with 2 (two organizations: Banking sector vs. academic institute) X 4 (Four factors of organizational learning obtained through factor analysis) design was carried out, while the later factor was a repeated measure.

ANOVA results indicated that there was a main effect of organizations [$F(1,138) = 6.90, p < .01$]. That means, these two organizations differ in terms of organizational learning processes, namely, Essential Processes of Organizational Learning, Interaction, Flexibility and Innovativeness. An inspection of means (Table 2.3) revealed that on all these dimensions of organizational learning process, the banking sector had higher scores than the academic institute. It indicates that in terms of organizational learning capabilities banking sector is leading ahead compared to the academic institute. It should be noted that though the academic institute is one of the premier institutes of the country and its faculty members have

distinctive achievements in their respective fields of specializations, however, expertise of individual member is not contributing towards the overall learning of the organization. Whereas, banking sector may not have that kind of expertise at the individual level, but each member is contributing towards the collective learning in a much prominent way. Support for this kind of finding comes from the earlier research of Ellis and Shpielberg (2003), where it has been shown that organizations, which work under stable conditions are less likely to have collective learning as compared to those, which face an uncertain environment. In the case of present study, banking sector faces much more volatile environment compared to an academic institute. This finding also brings another important point that, if individual members are not contributing to the collective learning of the organization, such as the academic institute in the case of this study, it implies that some knowledge is going waste and the organization is not able to tap as much knowledge and learning as is possible. But it should be noted that in an academic institute, there is heterogeneity of disciplines and so expertise are varied. If individual expertise is contributing significantly to their respective areas, then, such institutes operate successfully and are able to meet the demands of the academic environment. Moreover, it is imperative to mention that the academic institute referred here is only a decade old and it still has, probably, a long way to establish and strengthen its systems. As there are no findings about such institutes which are much older and established than this institute, it would prove worthwhile to investigate whether organizational learning takes place in similar manner or differently from this institute.

ANOVA results also indicated that there is main effect of organizational learning factors [$F(3, 414) = 37.44, p < .01$] and also an interaction effect of both the variables [$F(3, 414) = 7.40, p < .01$].

Main effect of organizational learning dimension indicates that all the four factors are distinct and the respondents are able to see the differences across these dimensions.

Relationship between Organizational Learning and Job Satisfaction

Table 2.5 presents the relationship between organizational learning and job satisfaction for banking sector sample. It is clear from the table that Extrinsic Satisfaction has significant relationship with Essential Processes of Organizational Learning and Interaction ($r = .29, p < .05$ & $r = .28, p < .05$, respectively). Intrinsic Satisfaction is significantly correlated to all the dimensions of organizational learning.

It can be concluded that most of the factors of organizational learning are significantly correlated with factors of job satisfaction. Extrinsic Satisfaction has significant relationship with Essential Processes of Organizational Learning and Interaction. This implies that organizations which provide their employees the chance to interact frequently with others, share innovative ideas, get more opportunity to learn, etc., will provide more extrinsic satisfaction to its employees. Intrinsic Satisfaction is significantly correlated to all the dimensions of organizational learning. Employees will experience more intrinsic satisfaction in an organization which puts premium on new ideas, gives a sense of belongingness as their opinions are also taken into consideration while taking decisions and appreciation of their new ideas by others. This finding supports the hypothesis that organizational learning will have positive relationship with job satisfaction. It has also been found by Mehra and Dhawan (2003) that some level of satisfaction was there amongst employees in software firms towards the learning environment.

On the other hand, in the case of academic institute sample (Table 2.6), all the dimensions of organizational learning are significantly related with the all the dimensions of job satisfaction. This further supports our initial hypothesis.

Conclusions and Implications

One of the main objectives of the present study was to investigate the differences in the organizational learning processes in different organizations. For this purpose, measures of organizational learning along with measure of job satisfaction were administered on two different organizations. Results indicated, as hypothesized, that there are differences in organizational learning processes in these two organizations.

It can, therefore, be concluded that there are differences in the organizational learning processes across different organizations. However these differences depend on the need and demand of the environment in which the organization is functioning. As found in this study, the banking sector where the environment is quite turbulent, organizational learning capabilities exceed as compared to that of the academic institute which function in a fairly stable environment and there is support for this kind of finding (Ellis & Shpielberg, 2003). But it should be noted that the academic institute referred in this study is only a few years old and its systems are not yet established and strengthened as compared to other institutes, which are much older. Therefore, it would be worthwhile to investigate whether organizational learning takes place in similar manner or differently in the academic institutes, which are older and well established.

There are practical implications of these findings for managers. As it has been found that there are differences in the organizational learning capabilities of different organizations, so managers must be sensitive to these differences and also whether their organization has learning capability or not. Moreover, they must also be aware that the environment in which their organization is embedded affects this capability.

After having found the answers related to the differences in organizational learning processes across organizations, further research questions have been taken up in the next study reported in Chapter 3.

Table 2.1: Factor Loadings Obtained: Organizational Learning Measures (N = 140)

SR.No.	Items	Factors*			
		1	2	3	4
02	The management conducts meetings/ interactions regularly to assess the development with regard to enhance the knowledge and skills of workers.	.60	.41	.15	.26
03	The organization appreciated the efforts of employees who have taken calculated risks in the past.	.64	.46	.16	.05
05	Organization encourages periodic meetings to foster interaction among the employees.	.60	.46	.24	.31
06	My organization learns new strategies and technologies according to changing business environment.	.79	.08	.37	.18
07	The organization is successful in keeping pace with the changing business environment by incorporating the new systems and trends that are prevalent at present.	.76	.07	.29	.21
09	My organization evaluates new ideas and proposals with open mind.	.78	.35	.26	.04
10	The organization is capable of taking novel decisions when it is required.	.79	.14	.31	.02
12	My organization allows me/ gives me the platform to utilize my creativity and innovativeness.	.42	.51	.46	.04
13	The management makes my role/ function in the organization clear to me.	.47	.36	.23	.32
14	The management arranges seminars and meetings with the experts of the field.	.50	.36	.13	.41
15	My organization seeks my opinion/ views while making decisions.	.44	.70	.03	.05
16	The management puts premium on new ideas.	.73	.27	.03	.27
17	Meetings and discussions have been successful and productive in the recent past.	.50	.49	.19	.13
18	My organization is constantly trying to develop new strategies to meet the demands of the customers.	.76	.23	.20	.35

22	Employees who come out with new ideas are appreciated by others.	.52	.28	.60	-.17
24	My organization allows me to share my experiences during meetings.	.44	.57	.50	.06
01	New technology/ machinery has been successfully adopted/ acquired by the organization in the recent past.	.20	.42	.31	.18
08	I get opportunity to learn from conferences/ meetings etc.	-.04	.76	.16	.39
23	We are allowed to interact with the top management when required.	.28	.69	.43	-.01
11	I interact frequently with my colleagues during meetings, coffee-breaks, etc.	.04	.07	.73	.32
19	I share news and information related to the current business trends, which will beneficial for the organization.	.22	.25	.55	.21
20	We share our views and discuss the issues related to the development of our organization.	.19	.33	.53	.55
21	We feel free to consult our colleagues whenever we encounter problems related to work.	.39	.19	.75	.09
04	The organization has come out with innovative products/ services in the recent past.	.36	.11	.22	.74
Eigen Value		12.24	1.57	1.23	1.08
Percentage of Variance		50.99	6.53	5.11	4.50
Cumulative Percentage of Variance		50.99	57.52	62.63	67.13

*Factor 1 = Essential processes of organizational learning; Factor 2 = Interaction; Factor 3 = Flexibility; Factor 4 = Innovativeness.

Table 2.2: Descriptive Statistics, Alphas and Intercorrelations of Organizational Learning Measures (N = 140)

Dimension	1	2	3	4
1. Essential processes of organizational learning	(.95)			
2. Interaction	.93**	(.91)		
3. Flexibility	.84**	.88**	(.89)	
4. Innovativeness	.77**	.72**	.71**	(.73)
Mean	6.12	6.09	. 6.90	6.54
SD	1.70	1.66	1.45	1.62

** = $p < .01$

Note: Figures in parenthesis include coefficients of alpha

Table 2.3: Descriptive Statistics of Organizational Learning Measure

Dimensions	Banking Sector (N=57)		Academic Institute (N=83)	
	Mean	SD	Mean	SD
1. Essential processes of organizational learning	6.78	1.50	5.67	1.70
2. Interaction	6.40	1.75	5.89	1.58
3. Flexibility	7.11	1.49	6.76	1.42
4. Innovativeness	6.94	1.52	6.27	1.63

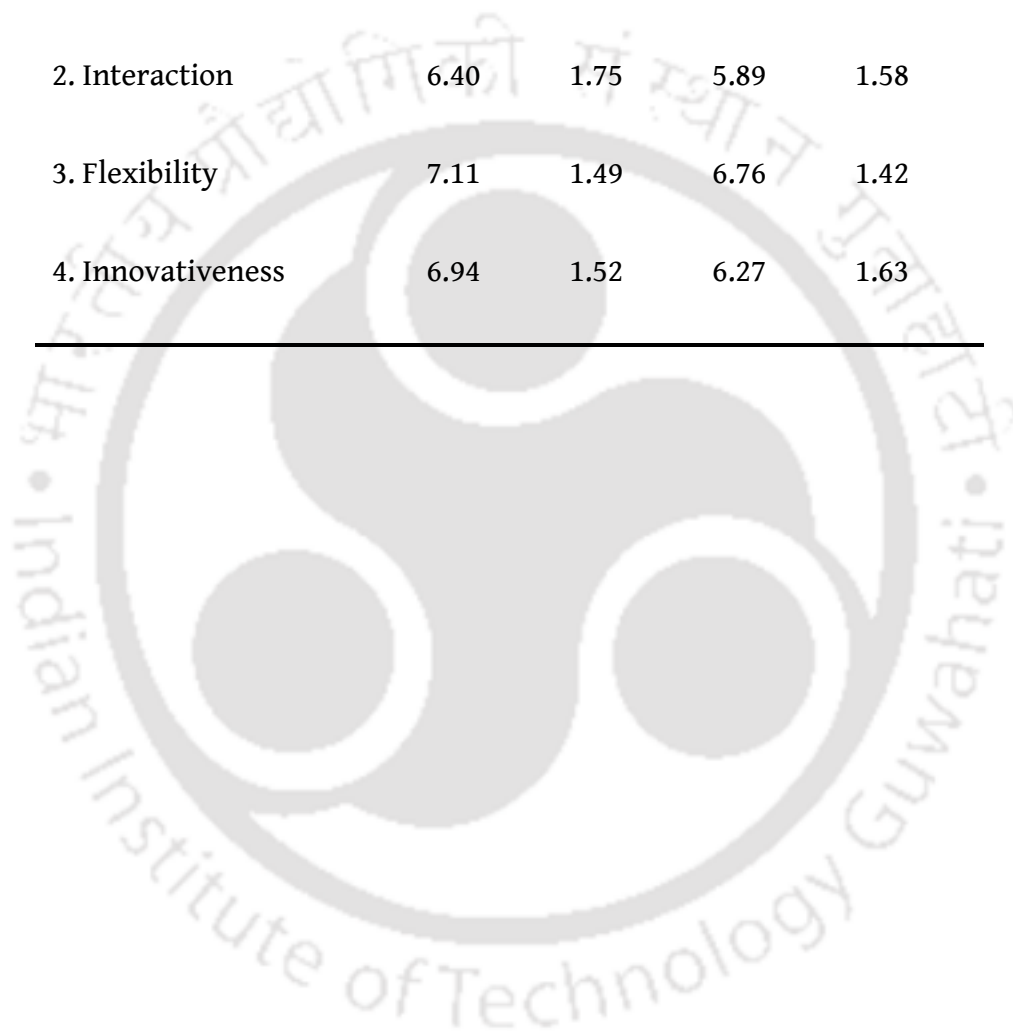


Table 2.4: Descriptive Statistics of Job Satisfaction

Dimensions	Banking Sector (N=57)		Academic Institute (N=83)	
	Mean	SD	Mean	SD
1. Social Satisfaction	5.67	0.92	5.54	1.05
2. Extrinsic Satisfaction	5.06	1.01	4.70	1.10
3. Intrinsic Satisfaction	5.18	0.99	5.30	1.13

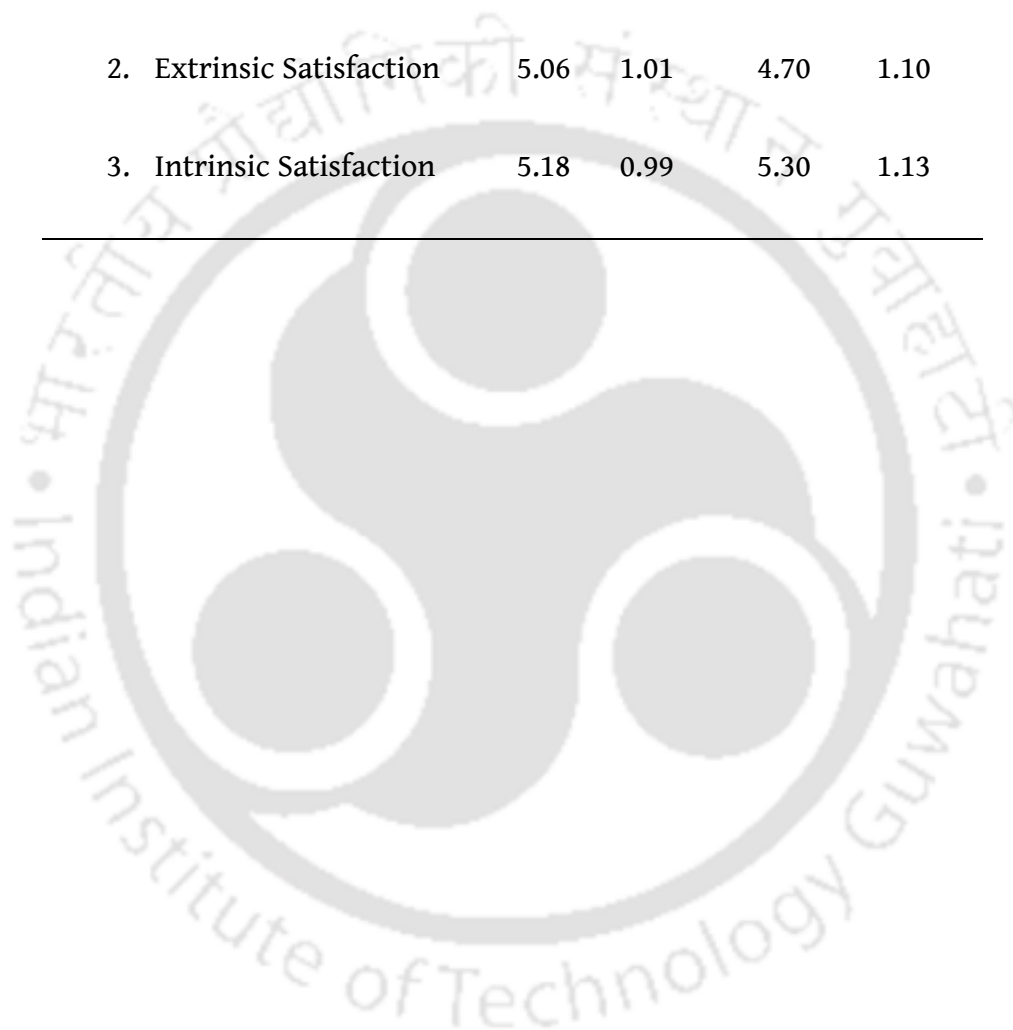


Table 2.5: Intercorrelations among Organizational Learning and Job Satisfaction for Banking Sector sample (N=57)

Factors	ssat	exsat	insat
1. Essential processes of organizational learning	.15	.29*	.47**
2. Interaction	.09	.28*	.50**
3. Flexibility	.02	.21	.35**
4. Innovativeness	.26	.09	.31*

ssat = social satisfaction; exsat = extrinsic satisfaction;
insat = intrinsic satisfaction
** = $p < .01$; * = $p < .05$

Table 2.6: Intercorrelations among Organizational Learning and Job Satisfaction for Academic Institute sample (N=83)

Factors	ssat	exsat	insat
1. Essential processes of organizational learning	.50**	.54**	.62**
2. Interaction	.53**	.54**	.68**
3. Flexibility	.58**	.46**	.63**
4. Innovativeness	.35**	.45**	.52**

ssat = social satisfaction; exsat = extrinsic satisfaction; insat = intrinsic satisfaction
 ** = $p < .01$; * = $p < .05$

Chapter 3

In the previous chapter Study 1 was reported, which aimed at answering some of the research questions, namely, (a) whether there are differences in organizational learning processes across different organizations, especially in Indian organizations, and (b) what is the relationship between organizational learning and job satisfaction. The answers obtained from this study, further prompted the researcher to explore the role of various contextual factors that effect organizational learning and finally the impact of organizational learning on the success of the organization. Therefore, Study 2 was carried out to answer the remaining research questions. This chapter comprises of two studies. Study 2A is quantitative in nature while Study 2B is a qualitative study, which is an augmentation of Study 2A.

Study 2A

As shown in the literature review presented in the earlier chapter, the emerging literature on learning organization assumes that organizational learning is an important determinant of long-term performance and survival for organizations (DeGues, 1988; Garvin, 1993; Yukl, 2009) as it provides the opportunities and mechanisms which will help to bridge the gap between the knowledge that the workforce of the organizations already have and what they need to acquire for continuous adaptation and improvement. It is, therefore, gaining popularity amongst many large organizations as they attempt to develop structures and systems, which are more adaptable and responsive to change (Dodgson, 1993).

Organizational learning is a continuous process where the organization tries to acquire new knowledge as well as use the existing knowledge to adapt to the changing external environment and remain competitive and successful. It includes processes like the acquisition of relevant new knowledge, diffusion of this knowledge to people in the organization who need it, and application of the knowledge to improve internal processes and external adaptation (Yukl, 2009). Eventually, these

processes become embedded in the systems and practices of the organization. At the same time, implementation of organizational learning requires conducive contextual factors which will allow the organizations to develop the learning processes.

However, despite the abundance of literature on this concept, “there was lack of cumulative and integrative work” (Lipshitz, Popper & Friedman, 2002). Therefore, the present research has attempted to provide a consolidated framework of organizational learning by adopting a process-oriented view of organizational learning and by incorporating the various contextual factors. This framework necessitated to study the differences in organizational learning processes because organizations functioning in different environments adopt different organizational learning processes to remain competitive and also to be successful (Argote, 1999; Ellis & Shpielberg, 2003; Perrow, 1984). Moreover, it is also important to explore how contextual factors like leadership and organizational culture affect these processes as both these factors are seen as essential for initiation and effective implementation of organizational learning processes in organizations. Leaders can directly encourage and facilitate collective learning by what they say and do and they can indirectly influence it by creating cultures, systems and structures that foster the absorption, assimilation and application of knowledge (Kavanagh & Ashkanasy, 2006). It has also been observed that organizational culture acts as a system of social control and can influence employees’ attitudes and behaviour through the values and beliefs propounded by the leaders (Flynn & Chatman, 2001; Kusluvan & Karamustafa, 2003; Schein, 1991). Researchers and practitioners have identified many ways through which leaders can encourage and facilitate the process of collective learning in organizations, however, there is limited systematic empirical research directly linking leadership and organizational learning (Popper & Lipshitz, 2000; Berson et al., 2006). Apart from organizational culture and leadership, strategy is one of the “core” elements that is essential for effective implementation of organizational learning (Fiol & Lyles, 1985; Francis & Mazany, 1996; Francis, 1997) as it influences the firm’s learning by providing a boundary to decision making and a context for the perception and interpretation of the environment (Fiol & Lyles, 1985). Thus, the

researcher has also attempted to study how different types of strategies affect the organizational learning processes while considering the fact that the relationship between the two is bi-directional (Fiol & Lyles, 1985).

Since organizational learning provides the opportunities as well as the systems and mechanisms to the organizational members to acquire, create and utilize knowledge, it is considered as an important source of core competence of the organizations as it leads to better performance and in turn affects the satisfaction of the workforce (Gardiner & Whiting, 1997). Organizations which have given priority to creating learning opportunities and development, have reported greater profitability and increased workers' job satisfaction (Filipczak, 1989; Leslie, Aring & Brand, 1998; Mulraney & Turner, 2001).

A detailed literature review concerning these variables has been presented in Chapter 1. From the literature review, the following research questions have emerged (these are being produced again for the convenience of readers) and the present research aims to answer them -

- 1) What are the differences in organizational learning processes across organizations?
- 2) What are the different leadership styles or combination of leadership styles that facilitate organizational learning?
- 3) What is the impact of top management leadership style on organizational learning?
- 4) Are there certain kinds of culture that are prerequisite for organizational learning?
- 5) Which kind of culture promotes learning that is beneficial to the organization?
- 6) What is the role of business strategies in the effective implementation of organizational learning process in an organization?
- 7) What is the impact of all these factors on the success of the organization?

In the case of the first question regarding the differences in the organizational learning process, a study was conducted and its results had been reported in Chapter 2. This was an empirical study conducted to explore the differences in organizational learning processes (essential processes of organizational learning, interaction, flexibility and innovativeness) across different Indian organizations for example, in banking sector and academic institution. It was found that these organizations differ in terms of organizational learning processes. Results revealed that banking sector was much ahead in the use of organizational learning processes in comparison to academic institute. Such finding was partly explained by the fact that banking sector faces much more volatile environment compared to an academic institute. The results of this study showed that there were differences in the organizational learning processes in different organizations and that such differences may be due to the environment in which the organizations are functioning, besides other factors.

It is worth mentioning that Study 1 served another purpose besides answering the question regarding the differences in the organizational learning process. In most researches, before embarking on a larger project, it is considered prudent to test the basic research questions and hypotheses on a smaller sample and then proceed further. Therefore, after having found the answer to the research question related to the differences in the organizational learning processes, the researcher conducted Study 2A on a larger sample to answer the remaining research questions.

Direct relationship between Leadership and Organizational Learning

Many researchers have acknowledged the importance of leadership and its role in initiating and instituting organizational learning (Bersen et al., 2006; Chang & Lee, 2007; Child & Heavens, 2001; Crossan & Hulland, 2002; Ellis et al., 1999; Garvin, 1993). Leaders are believed to have the quality to enhance the organizational learning capability by creating learning opportunities for the followers and conveying their visions for the organizations clearly (Edmondson, 2002; Popper &

Lipshitz, 2000). However, different leadership styles may have different impact. So the following hypotheses were proposed-

Hypothesis 1A - There will be positive relationship between leadership (transformational and transactional) and organizational learning.

Hypothesis 1B - There will be negative relationship between laissez-faire leadership and organizational learning.

It has been found that transformational leaders influence learning positively, challenging the existing level to influence organizational innovation and improve performance (Argyris & Schon, 1996; Glynn, 1996; Hurley & Hult, 1998; Senge et al., 1994). “Transformational leaders help to obtain better outcomes than those with other leadership styles” (Amitay et al., 2005). It was also found that transformational leadership, which broadens and elevates the interests and aspirations of the employees, was associated with more intensive organizational learning activity (Amitay et al., 2005). However, transactional leadership can also improve the efficiency of organizational learning (Bass & Avolio, 1990). Transactional leaders emphasize existing values and routines, focus on increasing efficiency in current practices, and usually produce only incremental changes in institutionalized learning (Vera & Crossan, 2004). The interplay of these two leadership styles in influencing organizational learning have been stressed by Vera and Crossan (2004) in their theoretical proposition of strategic leadership. While, laissez-faire leadership style characterized by avoidance of decision making and supervisory responsibility (Bass, 1990) may have the least significant role to play in influencing organizational learning as such leaders are neither sufficiently motivated nor adequately skilled to perform supervisory duties (Den Hartog, Van Muijen & Koopman, 1997). This type of leader usually gives no response to situations that may merit attention. It has also been found that there is negative association between laissez faire leadership and a variety of subordinate performance, effort and attitudinal indicators (Bass, 1990).

Moderating effect of Organizational Culture on the relationship between Leadership and Organizational Learning

There are some researches, mainly conceptual, which have highlighted the importance of organizational culture and its relationship with organizational learning (Chang & Lee, 2007; Cook & Yanow, 1993; Popper & Lipshitz, 1998; Schein, 1993a; Watkins & Marsick, 1993; Yanow, 2000). But, there are few empirical researches, which have examined the characteristics inherent in organizational cultures that subsequently affect the learning process in organizations (Lucas & Kline, 2008). DeLong and Fahey (2000) recognized organizational culture as a key component of knowledge management and organizational learning. Garvin (1993) was of the opinion that establishing a learning organization requires commitment and support from top management. It is important to note that many aspects of organizational culture are derived from leadership; however, organizational culture also has an impact on the development of leadership (Lucas & Kline, 2008). These factors have mutual affect on each other (Bass & Avolio, 1993). These findings imply the importance of both leaders and organizational culture in facilitating organizational learning. In the context of the present research, it is assumed that organizational culture will have a moderating impact on the relationship between leadership and organizational learning because certain kind of culture that guides the search for and interpretation of information (Harris, 1994) can enhance the impact of leadership on organizational learning (Lucas & Kline, 2008). While cultures that are low on trust discourage open and frank exchanges between levels in the hierarchy, etc., may act as deterrent or barrier (DeLong & Fahey, 2000; Schien, 1991). Therefore, the following hypotheses have been framed-

Hypothesis 1C - There will be high positive relationship between leadership (transformational and transactional) and organizational learning in organizations with strong organizational culture as compared to those with weak organizational culture.

Hypothesis 1D - There will be negative relationship between laissez-faire leadership and organizational learning in organizations with strong organizational culture as compared to those with weak organizational culture.

In the present context, strong organizational culture implies that the norms, values and beliefs in the organization are strongly held, well established (O'Reilly & Chatman, 1996) and have profound effect on the employees, while weak organizational culture is one in which important assumptions or values are not widely shared in an organization, but rather vary from individual to individual or unit to unit (Glaser, 1983; Riley, 1983). The uniformity and intensity of organizational values and norms in strong cultures are believed to increase cohesion and organizational commitment, and provide a standard way to encourage desirable work behaviour (Deal & Kennedy, 1982; Pottruck & Pearce, 2001; Tushman & O'Reilly, 1996) as well as enhance organizational performance (Denison, 1984). In a strong culture, employees' goals are aligned with management's goals; in a weak culture members' goals are counter to management's direction or perhaps simply scattered and divergent. This indirectly implied that strong organizational culture acts as enhancer of organizational processes which leads to higher organizational performance while weak organizational culture might not contribute much to the performance of the organization. Strong conducive culture might contain components of trust (Lucas & Kline, 2008), psychological safety (Lipshitz, Popper & Friedman, 2002), transparency (Popper & Lipshitz, 2000), etc. Leaders play an important role in creating these kinds of cultures in the organization. Popper and Lipshitz (2000) have found that leaders adopt certain kinds of behaviors and actions, which are required in building important values (such as trust), are also needed for effective implementation of organizational learning. Such leaders also affect the organizational members' commitment by means like providing clear vision and role modeling which are important aspects of transformational leadership style. Shamir (1995) has also noted that by adopting transactional style of leadership, CEOs build trust, dependability and an image of consistency among organizational members. Therefore, both transformational and transactional leadership play these significant

roles in creating such cultures, which are conducive for organizational learning. Consequently, it is expected that there will be higher positive relationship between leadership (transformational and transactional) and organizational learning in organizations where there is such strong culture as compared to weak cultures. However laissez-faire leadership style, being the most inactive and passive style does not try to motivate nor influence the subordinates and therefore such leadership may not foster organizational learning even in strong conducive culture.

Impact of Business Strategy on the relationship between Leadership and Organizational Learning

Various studies have shown that strategy is one of the “core” elements which is essential for effective implementation of organizational learning (Fiol & Lyles, 1985; Francis, 1997; James, 2003). Firms need to match their learning mechanisms with business strategy in order to utilize their knowledge base as a resource for competitive advantage (Sabherwal & Sabherwal, 2007). In addition, business strategy may affect the organization’s openness to learning as well as the kind of information it accumulates (Becerra-Fernandez & Sabherwal, 2001) which in turn may have an impact on organizational learning.

The typology of business strategy used in this study is Defender, Prospector (Miles & Snow, 1978) and Analyzer (Venkatraman, 1985). These different types of business strategy have different intensity of impact on organizational learning. Therefore, the following hypotheses have been proposed-

Hypothesis 1E - There will be higher positive impact of leadership (transformational and transactional) on organizational learning in organizations which adopts business strategy which is high on Analyzer and Prospector strategies than those low on these strategies.

Hypothesis 1F - There will be lower positive impact of leadership (transformational and transactional) on organizational learning in organizations which adopts high Defender business strategy than those low on it.

Amongst the three types of business strategies, Defender is the most stable and it lays more stress on operational efficiency and focuses more on learning from internal sources and therefore, functions efficiently in stable business environment (Sabherwal & Sabherwal, 2007). However, it tends to ignore developments and trends happening outside their domains and only focuses on growing through their expertise and successful limited product in the market (Miles, Snow, Meyer & Coleman., 1978; Venkatraman, 1989). Such type of strategy will not have much impact on organizational learning, which focuses on learning and exploration of further knowledge that will help the organization in innovation and also to compete and survive successfully in the present volatile business world. Unlike Defender strategy, Prospector's main focus is on exploring and exploiting new product and market opportunities (Miles et al., 1978) and experimentation with potential responses to changing trends in the external business environment (Venkatraman, 1989). It also invests heavily on individuals and groups who scan the environment for potential opportunities (Miles et al., 1978). These characteristics are crucial aspects which contribute to organizational learning. Similarly, Analyzer strategy, which focuses on searching deeper for the root cause of problems faced by the organization and tries to bring out the best possible solution alternatives (Miller & Friesen, 1983), helps the organization to generate knowledge which contributes to organizational learning in the long run. However, it should be noted that, it is the top management of the organization which ultimately directs and implements business strategy. Leaders enable strategizing and organizing (Colville & Murphy, 2006) in organizations. Therefore an attempt had been made in this research to explore the impact of business strategy on the relationship between leadership and organizational learning.

Further, this research has also attempted to explore the impact of all the variables on the performance of the organizations. However, no direct measure of performance, such as financial performance, has been used in the present research. Rather, indirect measure, such as job satisfaction has been used. Although, there are some researches which have tried to explore the positive impact of organizational learning on firm performance (e.g., Bhatnagar, 2006; Ellinger et al., 2002), but very few have tried to measure its association with issues related to the employees, such as job satisfaction (Chiva & Alegre, 2009) which might increase job performance (Babin & Boles, 1996) or organizational performance (Hwang & Chi, 2005).

Direct relationship between Leadership and Job Satisfaction

Job satisfaction is basically the feeling and attitude of employees towards their job. It provides an indication of an employee's well-being induced by the job (Michaelowa, 2002). There are some critical factors which have impact on it. Leadership style is one of the important factors, which influences job satisfaction of employees (Lashbrook, 1997; Robbins, 2001). The following hypotheses were framed-

Hypothesis 2A - There will be positive relationship between leadership (transactional and transformational) and job satisfaction.

Hypothesis 2B - There will be negative relationship between laissez-faire leadership and job satisfaction.

Different leadership styles differ in the degree to which they influence job satisfaction. Bass (1998) showed that transformational leadership can have a significantly greater impact than transactional leadership in predicting satisfaction of the employees with the leader. Earlier studies have also shown that leaders who encourage empowerment of the subordinates, participation in decision making and emphasize effective supervisory communication increased job satisfaction of the employees (Daniels & Bailey, 1999; Eylon & Bamberger, 2000; Gaertner, 2000; Kim,

2002). However, Wu and Lin (1998) found that in Taiwan's culture, contingent reinforcement of rewards implies an approval of the subordinates' ability and performance and hence, employees experienced job satisfaction. Shieh, Mills and Waltz (2001) also observed that nursing faculty members' satisfaction is enhanced when they received expected rewards from their boss. These findings show that contingent reward behaviour of transactional leadership style also play important role in influencing job satisfaction of employees. But laissez-faire leadership style, being the most ineffective or passive style, may have negative impact on job satisfaction. This may be due to the fact that laissez-faire leadership is neither sufficiently motivated nor equipped to lead the subordinates, therefore it is not able to influence the job satisfaction of the employees. Earlier researches (Bass, 1990; Judge & Piccolo, 2004) have also concluded that there will be negative relationship between laissez faire leadership and subordinates' performance, effort and other attitudinal indicators.

Moderating effect of Organizational Culture on the relationship between Leadership and Job Satisfaction

It has been found in the literature that organizational culture plays a key role in job satisfaction (Adkins & Caldwell, 2004; Lund, 2003; Silverthorne, 2004). Certain aspects of organizational culture which have been found to be strongly related to job satisfaction are empowerment, involvement and recognition (Johnson & McIntyre, 1998). Research have also shown that leadership behaviors can be used to influence employees to achieve better organizational outcomes (Loke, 2001) and such achievements in turn provide job satisfaction to the employees. Therefore, job satisfaction, as a work-related outcome, is determined by both organizational culture and leadership style. Therefore, the following hypotheses were framed -

Hypothesis 2C - There will be high positive relationship between leadership (transformational and transactional) and job satisfaction in organizations with strong organizational culture as compared to those with weak organizational culture.

Hypothesis 2D - There will be high negative relationship between laissez-faire leadership and job satisfaction in organizations with strong organizational culture as compared to those with weak organizational culture.

Strong culture, in the present context, implies that the practices and norms in the organization are well established and have profound effect on the employees. In a way it reflects the intensity of the culture prevalent in an organization which is conducive to work. Weak organizational culture, on the other hand, is one in which important assumptions or values are not widely shared in an organization, but rather vary from individual to individual or unit to unit (Glaser, 1983; Riley, 1983). Empirical studies have illustrated that perception of members with respect to the nature and strength of organizational culture was a critical component of human resource management, change management, leadership, work-related behaviours and attitudes that can impact task performance (Allen, 2006; Lee & Yu, 2004; Lund, 2003; MacIntosh & Doherty, 2005). Moreover, leadership style which encompass behaviours such as inspiring teamwork, challenging tradition, enabling others, setting examples, and rewarding high performance have also been found to have significant effect on role clarity, self-efficacy and job satisfaction (Gaertner, 2000). Therefore, in the present research, it has been assumed that strong organizational culture will have more effect on the relationship between leadership (transformational and transactional) and job satisfaction as compared to those with weak organizational culture. Organizational culture has been seen as moderator variable in the context of studying leadership (Howell, Dorfman & Kerr, 1986). However, as laissez-faire leadership style is the most ineffective style, therefore, there is lack of response to subordinates' need and performance (Hinkin & Schriesheim, 2008a). Such leaders mostly avoid making decisions and do not reward subordinates for their performance. Hence, subordinates feel that there are no support and guidance when they need it and consequently feel uncared and are likely to experience dissatisfaction with their job. Therefore, such leadership style often inhibits satisfaction even in strong conducive culture.

Impact of Organizational Learning on the relationship between Leadership and Job Satisfaction

It has been assumed in earlier researches that organizational learning will have positive outcome on organizational performance (Chiva & Alegra, 2009). In this study, job satisfaction has been used as a variable to assess the performance of the organization. Therefore, an attempt has been made to study the impact of organizational learning on the relationship between leadership and job satisfaction.

Job satisfaction is generally recognized as a multifaceted construct that includes both intrinsic and extrinsic job elements (Howard & Frick, 1996). Different leadership styles have varying effect on these facets of job satisfaction (Bass, 1998). Kim (2002) suggested that participative management that incorporates effective supervisory communication can increase employees' job satisfaction. Earlier studies have found that in organizations which provide learning opportunities in the job, the organizational members experienced job satisfaction (Rowden, 2002; Rowden & Ahmed, 2000). Therefore, it was hypothesized that-

Hypothesis 2E – There will be high positive impact of leadership (transformational and transactional) on job satisfaction in organizations with high focus on organizational learning while the reverse will be true in organizations with low focus on organizational learning.

It has been found that organizations which focus on “learning and development increases employees’ satisfaction, productivity and profitability” (Watkins & Marsic, 2003). Such organizations focus on creating an environment in which employees are encouraged to apply new behaviours to achieve the organizational goals (Pool & Pool, 2006). Therefore, it is assumed that organizational learning will have an impact on the relationship between leadership and job satisfaction.

All the hypotheses with regard to different variables are being presented in figure 2.

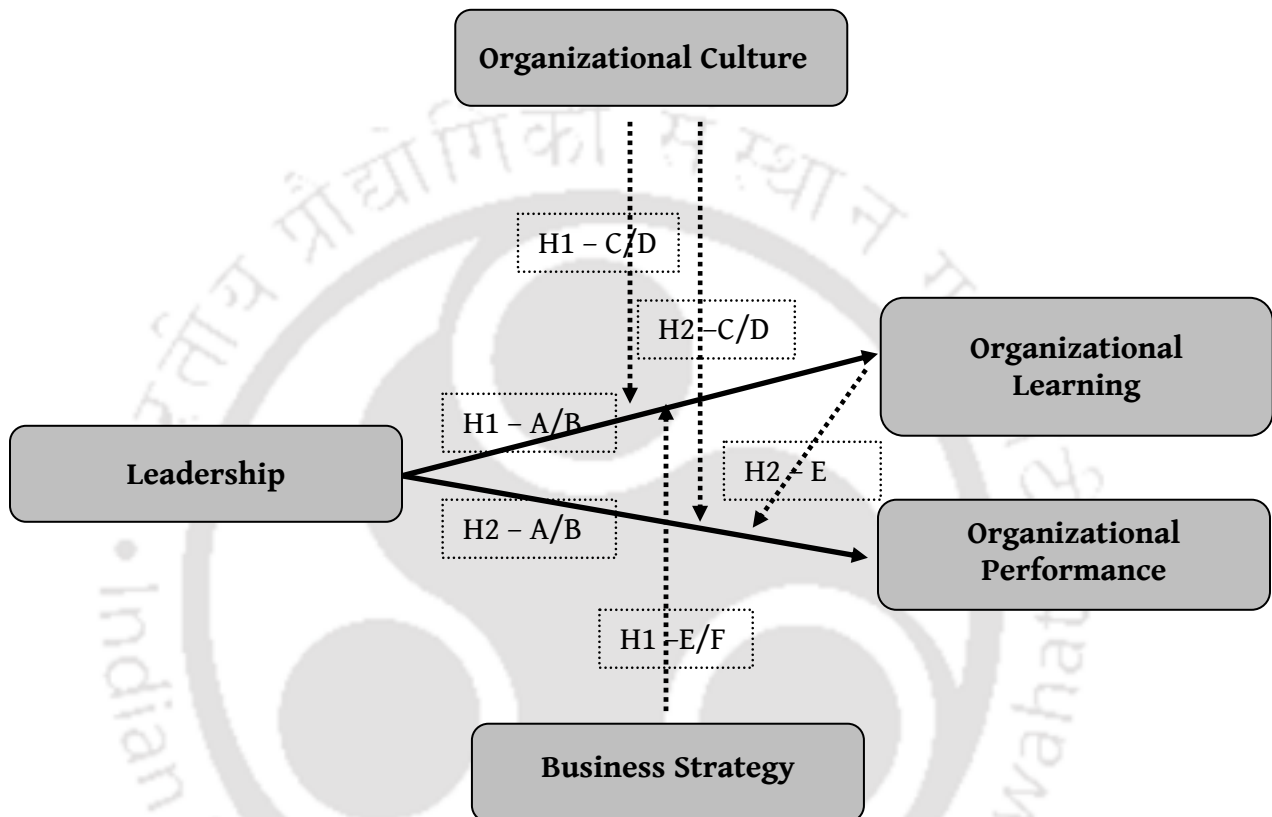


Figure 2: Proposed relationship among variables and hypotheses
(broken line indicates moderating effect)

Method

Sample

Data for the present study were collected from two different samples. The first one comprised of middle level managers (N = 286) from 15 different organizations located in three metropolitan cities (Delhi, Bangalore and Kolkata). Out of these 15 organizations, 13 were from public sector (3 each in transportation and manufacturing sector, 2 in construction and one each in logistics, scientific R & D organization, banking, telecom and catering and tourism). In the case of private sector, there were two organizations (one each in banking and pharmaceutical). These middle level managers had worked in their present organization on an average of 8.25 years (SD = 8.12) and it ranged from 2 months to 35 years. Their mean age was 41.5 years (SD = 10.0) and 90% of the sample were male employees while only 10% were females. Distribution of first sample (N = 286) is presented in Table 3.1.

The second sample consisted of top management of the organizations such as Executive Director and General Manager (N = 29, Male = 27, Female = 2) who had the decision making power and their mean age was 49.6 years (SD = 5.85). They had worked in their present post for an average of 6.2 years (SD = 8.7) and it ranged from 3 months to 36 years. Data were collected from 13 organizations out of the 15 organizations stated above. A brief profile of the organizations is given in Appendix C.

Procedure

Data was collected through two sets of questionnaires. Set 1 comprised of four sections – leadership (Multifactor Leadership Questionnaire by Avolio & Bass, 2004), organizational learning (Ellis & Globerson, 1996), organizational culture (adapted from Hofstede, Neuijen, Ohayv, & Sanders, 1990) and job satisfaction (Schnake, 1983). While Set 2 consisted of measure of business strategy (Venkatraman, 1989).

In order to collect the data, the organizations were first identified from various websites. Then request letters were written to the HR heads seeking their permission to collect data from their respective organizations by following the standard procedure of maintaining confidentiality.

Different approaches were followed to collect data through Set 1 and Set 2. In the case of Set 1, the questionnaires were distributed amongst the middle-level managers of the 15 different organizations mentioned above. A total of 309 filled questionnaires were received. However, after scrutinizing the questionnaires, only 286 questionnaires could be used for the analysis, as the remaining questionnaires were incomplete. Therefore, 92.55% of the questionnaires were used for the analysis.

For Set 2, the 'key informant approach' was followed to collect data from the most informed persons, which were mainly people at the top management level, such as Executive directors, General Manager, etc. This approach was adopted as, only top management is involved in making strategy and they are the right people from which information about the strategy of their respective organizations could be obtained. Such an approach helps to minimize certain potential measurement errors (Huber & Power, 1985; Venkatraman, 1989). Ultimately, completed questionnaires were received from 13 out of the same 15 organizations from which data for Set 1 were collected. In all, only 29 valid questionnaires collected from the respondents were valid for further analysis.

Measures

A) Leadership (Multifactor Leadership Questionnaire by Avolio & Bass, 2004)

The Multifactor Leadership Questionnaire (MLQ) offers a full range of assessment of leadership behaviors. This questionnaire has evolved over the last 25 years and there is considerable evidence that indicate that the MLQ questionnaire

and the factors obtained are universal in nature and can be applied across cultures (Avolio & Bass, 2004). The dimensions of leadership used in MLQ are described below.

Transformational Leadership

Bass (1985) defines transformational leadership in terms of the leader's motivational effect on followers. The followers feel loyalty, trust, admiration and respect toward the transformational leader. They are motivated to serve and achieve more than they were originally expected to. They are inspired to achieve higher-order needs and are made more aware of the organization's needs for their unique skills and talents. It is acknowledged that there are four types of transformational leadership behaviors (Bass & Avolio, 1990).

1. Idealized influence (Idealized Attributes/ Idealized Behaviors)

A manager-leader with idealized influence shows by role modeling his or her willingness to sacrifice private interests for the good of the organization. She/he speaks of the ideological and moral implications of their decisions. Bass and Avolio (1990) have divided Idealized Influence into Attributed (where followers wish to be associated with the leader) and Behavior (high moral and ethical code).

2. Inspirational Motivation

This factor is expressed in the manager-leader's ability to motivate through inspiration and formulate, together with their followers, a clear and inspiring vision of the organization's future and express optimism about the future of the organization, show enthusiasm for shared topics and radiate confidence that the aims will be achieved.

3. Intellectual Stimulation

The effect of intellectual stimulation aroused by the leader is expressed first of all in willingness to constantly examine the present state of affairs, and not to see the existing situation as an unchangeable fact. Leaders who are characterized by

the ability to create intellectual stimulation make their followers to “think differently”, and work creatively.

4. Individualized Consideration

Leaders high on individualized consideration relate to each employee personally and not just as “one more”, treat each employee as an individual with needs, abilities, and aspirations different from those of others, help their workers to develop their strong sides, and spend a lot of time guiding and training their people. They are ready to learn both from successes and failures.

Transactional Leadership

Transactional leadership, in contrast, seeks to motivate followers by appealing to their own self-interest. Its principles are to motivate by the exchange process. Transactional behaviors focus on the accomplishment of task and good worker relationships in exchange for desirable rewards. This consists of the following types-

1. Contingent Reward

Contingent reward involves an interaction between leader and followers that works on an exchange. For example, the leader provides befitting rewards when followers achieve the targeted objectives. The emphasis is on facilitating this achievement.

2. Management-by-Exception (Active)

This focuses on followers’ performance irregularities. When active, the leader monitors to safeguard against mistakes and allows the present state to exist without being changed.

3. Management-by-Exception (Passive)

When passive, the leader intervenes to make some correction only when things go wrong.

Laissez-faire

This is the avoidance or absence of leadership, and is the most inactive style. The nominal leader avoids intervention. Decisions are often delayed; feedback, rewards, and involvement are absent, and no attempt is made to motivate followers or to recognize and satisfy their needs.

The MLQ questionnaire consists of 36 items which were answered on a 5-point scale ranging from 0-4. However for the present research work, a modified scale was used ranging from 1 (Not at all) to 5 (Frequently, if not always). Factor analysis was not carried out. The original factor structures were used as high reliability and validity of these factors have been found, consistently, in a number of empirical studies (Bass, Avolio, Jung & Berson, 2003; Den Hartog, Van Muijen & Koopman, 1997). As MLQ is a copyright material, only sample items are permitted to be presented in dissertations.

The MLQ scale scores are average scores for the items on the scale. These scores are obtained by summing up the items which belong to each factor and dividing by the number of items that make up the factor. Each of the nine leadership styles comprised of four items. In the present study, Coefficient alpha values of these factors ranged from .58 to .84 which is quite satisfactory. The psychometric properties are given in Table 3.2.

B) Organizational Learning (Ellis & Globerson, 1996)

The questionnaire was developed by Ellis and Globerson (1996) and also by Ellis et al. (1999). It was aimed at measuring perceptions of the existence and

significance of “organizational learning mechanisms” (institutionalized organizational arrangements that allow the organization’s members to learn on behalf of the organization) and values based on the structural-cultural perspective (Lipshitz et al., 2002). As described in this approach, in order to learn, organizations require the existence of mechanisms for collecting, analyzing, storing, and disseminating information and knowledge throughout the organization.

This questionnaire comprises of 5 dimensions of organizational learning- *formal learning process, information dissemination, training, information gathering and storage and retrieval*. This is in similar line with the dimensions proposed by Huber (1991), which also consists of dimensions like *knowledge acquisition* (the process by which knowledge is obtained), *information distribution* (the process by which information from different sources is shared and thereby leads to new information or understanding), *information interpretation* (the process by which distributed information is given one or more commonly understood interpretations) *and organizational memory* (the means by which knowledge is stored for future use).

This questionnaire consists of 46 items. For the present research work, after obtaining prior permission from the author, the language was modified slightly and used for the research purpose. This questionnaire has been used previously in many Israeli and American samples (information obtained through personal communication with one of the authors, Prof. Ellis). A scrutiny of the items regarding its meaning and context showed that the items were culture-free. Moreover, this questionnaire has been used in other studies (Amitay et al., 2005; Ellis & Spielberg, 2003) and usually the reliability coefficients from both the studies ranged from .78 to .92, which is satisfactory. It should be noted that the questionnaire used to measure organizational learning in study 1 was different from this. In the earlier study, the questionnaire was prepared by the researcher based on the dimensions of Mehra and Dhawan (2003) as standard complete items were not available at that point of time and this prompted the researcher to develop the organizational learning questionnaire. It yielded 4 dimensions reported in Study 1 (Essential Processes of

Organizational Learning, Interaction, Flexibility and Innovativeness) and though the dimensions were different from the present questionnaire, yet both of them captured the meaning of organizational learning as operationalized by the researcher. The reliability coefficients were satisfactory. However for this study, it was felt prudent to use a standardized questionnaire which has been used in several earlier studies.

The factor analysis of the items was carried out using the principle component with varimax rotation method. Only those items with loadings of .40 and above were considered for the factors (Table 3.3). There were minimum cross-loadings of the items. This process yielded 8 factors –

Factor 1 consisted of 12 items which indicated the different learning processes such as meetings, continuous provision of information concerning the tasks in the organization, and feedback systems, etc. Thus it was labeled as *Formalized Learning Procedures (FLP)*.

Factor 2 consisted of 9 items that showed the different ways in which the expertise of the members of the organization are upgraded, such as individual and group training, rotation of roles, regular supply of professional and managerial literature, etc. Therefore it was named as *Upgradation of Expertise (UE)*.

Factor 3 comprised of 11 items which described the extent to which information is provided and disseminated to the organizational members, members are encouraged for participation, etc. Thus it was labeled as *Emphasis on Interaction and Information Dissemination (EIID)*.

Factor 4 included 6 items that showed how information is stored through various means and how it is maintained for easy retrieval, it was named as *Storage and Retrieval of Information (SRI)*.

Factor 5 consisted of 8 items which indicated the different processes in which information is documented like putting procedures in writing, computerized filing system, etc. Thus it was labeled as *Formal Documentation Procedures (FDP)*.

Factor 6 consisted of 3 items that showed the different ways in which the members of the organization interact and willingly share information. Therefore it was named as *Sharing of Information (SI)*.

Factor 7 comprised of 2 items which indicated how organizations are engaged in joint ventures in business matters. Thus it was labeled as *Learning through Joint Ventures (LJV)*.

Factor 8 included 2 items that showed ability of the organization to check the causes of mishaps and failures, and it was named as *Detection of Errors (DE)*.

Factor analysis result, coefficient of alpha and other psychometric properties are given in Table 3.4. The coefficient alpha values of these 8 dimensions ranged from moderate to high, that is, from .56 (*Detection of Errors*) to .90 (*Emphasis on Interaction and Information Dissemination*).

C) Organizational Culture (adapted from Hofstede et al., 1990)

The organizational practice scale of Hofstede et al., (1990) was used to measure organizational culture as the core values of an organization, reflected in members' behaviour and organizational practices, are considered the most readily apparent and measurable forms of culture (Ashkanasy et al., 2000). Hofstede et al. (1990) were also of the opinion that "shared perceptions of daily practices" were considered as the core of an organization's culture. Therefore, they assessed culture of an organization basically through organizational practice items (Hofstede et al., 1990). Organizational practices are "typical, systematic and customary activities and

behaviours of organizational members which are rewarded, expected and supported by a subgroup and/or organization” (Singh, Verbeke, & Rhoads, 1996).

The organizational practice scale of Hofstede et al., (1990) comprises of six basic dimensions- Dimension 1 (process-oriented versus result-oriented) opposes a concern with means (process) to a concern with goals (results); Dimension 2 (employee-oriented versus job-oriented) contrasts a concern for people to getting the job done; Dimension 3 (parochial versus professional) opposes units whose employees derive their identity largely from the organization (parochial) to units in which people identify with their type of jobs (professional); Dimension 4 (open system versus closed system) opposes open systems to closed systems; Dimension 5 (loose versus tight control) refers to the amount of internal structuring in the organization, while Dimension 6 (normative versus pragmatic) deals with customer orientation. Pragmatic organizations are market-driven; employees in normative organizations are more focused on following the rules and procedures of the organizations which are more important than the results. These basic dimensions of organizational culture operationalized in terms of practice, have been used in a number of studies, for example, Singh et al., (1996), Verbeke (2000), Ogaard (2006), etc. In the present study, only 19 items from this scale were used, as these items showed consistent results in earlier studies such as that of Singh et al. (1996) and Ogaard (2006). It was also warned by Hofstede et al. (1990) that blanket replication of this questionnaire was not advisable.

The factor analysis of these items was carried out using the principle component with varimax rotation method. Only those items with loadings of .40 and above were considered for the factors (Table 3.5). There was cross-loading in the case of only one item. Factor analysis of these 19 items yielded five factors-

Factor 1 comprised of 6 items which indicated the congenial situations in which the organization encourage the employees to come out with their ideas and opinions and also take care of the employee and the members of the organization, in

return, employees work for the benefit of the organization by putting their maximum effort and even taking risks. Therefore it was named as *Synergetic Culture*.

Factor 2 comprised of 5 items indicating the extent to which organizational members are closed and secretive and mistrust each other. There is emphasis on adhering to the rules and regulations of the organization. So this was labeled as *Closed Culture*.

Factor 3 consisted of 5 items exhibiting the extent to which the organization focuses on the welfare of the organizational member and lay emphasis on taking care of the employees' needs and problems, both personal and professional. The management also tries to make the employees comfortable. This was labeled as *Employee-Oriented Culture*.

Factor 4 comprised of 2 items which indicated that organization gives more importance in achieving the result than the procedures which have been used to execute the work and this was named as *Result-Oriented Culture*.

Factor 5 comprised of 2 items which focused on the aspect of organizations that is interested only in the work that the employees perform and it was labeled as *Job-Oriented Culture*.

Factor analysis result, coefficient of alpha and other psychometric properties are given in Table 3.6. The coefficient alpha values of these 5 dimensions were moderate and it ranged from .31 (*Job-Oriented Culture*) to .65 (*Closed Culture*).

D) Job Satisfaction (Schnake, 1983)

Schnake's (1983) scale for measuring Job Satisfaction consists of 11 items, which comprise of 3 dimensions, namely, Intrinsic Satisfaction, Extrinsic Satisfaction and Social Satisfaction. The items were rated on a 7 point scale which ranged from 1 –

Very satisfied to 7 – Very unsatisfied. Since the scales of these items were opposite to those of other variables, the items were reversed scored for the analysis. The factor analysis of these items was carried out using the principle component with varimax rotation method. Only those items with loadings of .40 and above were considered for the factors (Table 3.7). There was cross-loading in the case of only one item. Factor analysis yielded three factors -

Factor 1 comprised of 7 items which indicated the satisfaction derived from the activities of the job itself and it was labeled as *Intrinsic Satisfaction*.

Factor 2 composed of 4 items indicating social aspect such as friendliness of colleagues and respect received from them. Also, it has one item related to job security. Thus, it was termed as *Social Satisfaction*.

Factor 3 consisted of 2 items and it referred to the satisfaction experienced by the employees, from external factors of the job, such as pay, fringe benefits, etc., and hence it was named as *Extrinsic Satisfaction*.

Factor analysis result, coefficient of alpha and other psychometric properties are given in Table 3.8. The coefficient alpha values of these 3 dimensions were quite high, that is, .88 (*Intrinsic Satisfaction*), .80 (*Extrinsic Satisfaction*) and .72 (*Social Satisfaction*).

E) Business Strategy (Venkatraman, 1989)

There are 29 items in this tool and it comprises of 6 dimensions, namely, (a) *Aggressiveness*- this refers to the posture adopted by a business in its allocation of resources for improving market positions at a relatively faster rate than the competitors in its chosen market, (b) *Analysis*- this refers to the extent of tendency to search deeper for the roots of problems, and to generate the best solution alternatives, (c) *Defensiveness*- this reflects the defensive behavior (Miles & Snow,

1978), and is manifested in terms of emphasis on cost reduction and efficiency seeking methods. It also reflects the behavior of organizations seeking to defend their core technology as well as preservation of their products, markets, etc., (d) *Futurity*- this reflects the relative emphasis on effectiveness (longer- term) considerations versus efficiency (shorter-term) considerations, (e) *Proactiveness*- this reflects proactive behavior in relation to continuous search for market opportunities and experimentation with potential responses to changing environmental trends (Miles & Snow, 1978) and (f) *Riskiness*- this dimension captures the extent of risks involved while taking certain decisions as well as choice of products and markets (this dimension was dropped in this study as it had very low value of Cronbach alpha, i.e., .13).

But in this research, typology of strategy proposed by Miles and Snow (1978), that is, Defender, Prospector and Analyzer strategies were adopted. However, Analyzer Strategy, in this case, is different from that given by Miles & Snow (1978). According to them, it is the middle point between the following two extremes, but in the present research, it refers to the extent of tendency of organizations to search deeper for the roots of problems, and to generate the best solution alternatives. Prospector Strategy is a combination of Proactiveness, Futurity and Aggressiveness Strategies as it comprise of components of all these three factors. Factor analysis was not carried out as the sample size was small (Sample 2; N = 29). Coefficient of alpha and other psychometric properties are given in Table 3.9. The coefficient alpha values of these 3 dimensions are satisfactory, that is, .67 (*Defender Strategy*), .86 (*Analyzer Strategy*) and .76 (*Prospector Strategy*).

In order to test the above stated hypotheses, the following scheme of analyses was carried out. Details of the analyses are provided with the results.

1) Analysis of Variance (ANOVA)

ANOVA was used to find out whether there were differences amongst the dimensions of the various variables across different organizations. If the main effect of the organizations on the scores of dimensions of the variable was significant, then this implied that the organizations differ from each other on those dimensions. This provides ground for further exploration of the effect of the variable or the relation amongst the various variables taken for the study.

2) Correlation and Stepwise Multiple Regression

Correlation was used to study the relationship amongst the variables. Moreover, in order to find out more precise information about the main predictors of the dependent variables, stepwise multiple regression was used. Stepwise multiple regression was used because this analysis allows the main independent variable which explains the maximum variance of the dependent variable to enter first and then those explaining lesser variance. Further, it extends the information about the relative strength of impact on dependent variable by independent variables.

Results

ANOVA

Leadership

In order to find out whether the organizations vary from each other on all the dimensions of leadership, an ANOVA with 15 organizations (Organizations: 15 different organizations) X 9 dimensions of leadership (Leadership: Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception(Passive), Laissez-faire leadership) design was carried out, while the later factor was a repeated measure because the

scores on the different dimensions of leadership are the observations of the same subject.

ANOVA results given in Table 3.10 indicated that there was significant main effect of organizations [F (14, 271) = 2.66, $p < .00$]. This implies that there are significant differences amongst the organizations on the dimensions of leadership. There was also significant interaction effect [F (112, 2168) = 3.26, $p < .00$] and significant main effect of the dimensions of leadership [F (8, 2168) = 206.88, $p < .00$]. This implies that the respondents were able to differentiate in the various dimensions of Leadership.

From the results of the ANOVA as described above it can be concluded that there were significant differences amongst the organizations on the leadership dimensions and that the respondents were able to clearly observe the differences amongst the 9 dimensions of leadership.

Organizational Learning

In order to find out whether the organizations vary from each other on all the dimensions of organizational learning, an ANOVA with 15 organizations (Organizations: 15 different organizations) X 8 dimensions of organizational learning (Organizational Learning: Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures, and Detection of Errors) design was carried out, while the later factor was a repeated measure because the scores on the different dimensions of organizational learning are the observations of the same subject.

ANOVA results given in Table 3.11 indicated that there was significant main effect of organizations [F (14, 271) = 3.23, $p < .00$]. This implies that there are significant differences amongst the organizations on the dimensions of

organizational learning. There was significant main effect of the dimensions of organizational learning [F (7, 1897) = 9.90, $p < .00$]. This implies that the respondents were able to differentiate the various dimensions of organizational learning. There was also significant interaction effect [F (98, 1897) = 6.04, $p < .00$].

From the results of the ANOVA as described above it can be concluded that there were significant differences amongst the organizations on the organizational learning dimensions and the respondents were able to observe the differences amongst the dimensions of organizational learning.

Organizational Culture

In order to find out whether the organizations vary from each other on all the dimensions of organizational culture, an ANOVA with 15 organizations (Organizations: 15 different organizations) X 5 dimensions of organizational culture (Organizational culture: Synergetic, Closed, Employee oriented, Result oriented and Job oriented) design was carried out, while the later factor was a repeated measure as these scores were the observations of the same respondent on the different dimensions of organizational culture.

ANOVA results given in Table 3.12 indicated that there is significant main effect of the dimensions of organizational culture [F (4, 1084) = 7.72, $p < .00$]. This implies that the respondents were able to differentiate the various dimensions of organizational culture. However, there was no significant main effect of organizations [F (14, 271) = .75, *n. s.*]. This implies that there are no significant differences amongst the organizations on the dimensions of organizational culture. The interaction effect was also not significant [F (24, 32) = 1.30, *n. s.*].

It can be derived from the results of the ANOVA as described above, that the organizations did not have much difference in terms of organizational culture. Similar organizational culture may be prevalent in these organizations.

Job Satisfaction

In order to find out whether the organizations vary from each other on all the dimensions of job satisfaction, an ANOVA with 15 organizations (Organizations: 15 different organizations) X 3 dimensions of job satisfaction (Job Satisfaction: Intrinsic, Social and Extrinsic) design was carried out, while the later factor was a repeated measure as these scores were the observations of the same respondent on the different dimensions of job satisfaction.

ANOVA results given in Table 3.13 indicated that there was significant main effect of organizations [$F(14, 271) = 4.04, p < .00$]. This implies that there are significant differences amongst the organizations on the dimensions of job satisfaction. There was significant main effect of the dimensions of job satisfaction [$F(2, 542) = 101.32, p < .00$]. This implies that the respondents were able to differentiate amongst the various dimensions of job satisfaction. There was also significant interaction effect [$F(28, 542) = 6.49, p < .00$].

From the results of the ANOVA as described above, it can be concluded that there were significant differences in the job satisfaction experienced by the respondents of the different organizations.

Business Strategy

This measure was from Set 2 questionnaire and it was administered to the top management level of the organization. The data were collected from 13 organizations out of the 15 organizations (from which data for set 1 was collected) and N was 29.

In order to find out whether the organizations vary from each other on all the dimensions of business strategy, an ANOVA with 13 organizations (Organizations: 13 different organizations) X 3 dimensions of business strategy (Business Strategy: Analyzer, Defender and Prospector) design was carried out, while the later factor was

a repeated measure as these scores were the observations of the same respondent on the different dimensions of the factor (business strategy).

ANOVA results given in Table 3.14 indicated that there is significant main effect of the dimensions of business strategy [$F(2, 32) = 5.75, p < .01$]. This implies that the respondents were able to differentiate amongst the various dimensions of business strategy. There was no significant main effect of organizations [$F(12, 16) = 1.25, n. s.$]. This implies that the organizations did not have difference in terms of business strategy. There was also no significant interaction effect [$F(24, 32) = 1.30, n. s.$].

It can be inferred from the results of the ANOVA, that the organizations did not have significant differences in business strategy adopted by the organizations.

For exploring the relations amongst the various variables, correlation and stepwise multiple regression were carried out. These analyses were carried out under different conditions – direct relationship, moderating effect of organizational culture, and also impact of the different business strategies and organizational learning. These analyses are described below -

Relationship between Leadership and Organizational Learning

Direct relationship between Leadership and Organizational Learning (N = 286)

In order to study the direct relationship between leadership and organizational learning, correlations as well as stepwise multiple regression analyses were carried out. The stepwise multiple regression analysis was carried out considering factors of **leadership** [9 factors: Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-Exception (Active), Management-by-Exception (Passive) and Laissez-faire], as independent

variables, while dependent variables were 8 factors of **organizational learning** [**8 factors**: Formalized Learning Procedures Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures, and Detection of Errors].

Correlation Results

It was observed from Table 3.15, that Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, and Contingent Reward of Leadership had significant positive correlation with most of the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures, except for Detection of Errors.

Management-by-Exception (Active) had significant positive correlation only with Upgradation of Expertise while Management-by-exception (Passive) had significant positive correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information except for Learning through Joint Ventures and Detection of Errors.

Laissez-faire had significant negative correlation with all the dimensions of organizational learning except for Learning through Joint Ventures.

Stepwise Multiple Regression Analysis Result

It was evident from Table 3.16 that (1) Contingent Reward, Idealized Influence (Attributed) and Idealized Influence (Behaviour) were significant predictors of all the 8 dimensions of organizational learning; (2) the maximum variance, that is, 16% was explained by Contingent Reward of transactional leadership with respect to Emphasis on Interaction and Information Dissemination and it also explained 15%, 11%, 10%, 9% and 8% of the variance respectively of Formal Documentation Procedures, Formal Learning Procedures, Ugradation of Expertise, Detection of Errors, and Storage and Retrieval of Information. It also explained 8% of the variance of Sharing of Information; (3) Idealized Influence (Attributed) of transformational leadership explained 1% of the variance in both Formal Learning Procedures and Formal Documentation Procedures; (4) Idealized Influence (Behaviour) of transformational leadership explained 1% of the variance in both Learning through Joint Ventures and Detection of Errors.

In short, among the 9 dimensions of the independent variable, Contingent Reward of transactional leadership emerged as the best predictor ($\beta = .40, p < .00$) and among the dimensions of the dependent variable, Emphasis on Interaction and Information Dissemination was the best predicted factor.

Moderating effect of Organizational Culture on the relationship between Leadership and Organizational Learning

In order to study the moderating effect of organizational culture on the relationship between leadership and organizational learning, the following method was adopted. Median was computed for each of the five dimensions of organizational culture – Synergetic Culture, Closed Culture, Employee-Oriented Culture, Result-Oriented Culture and Job-Oriented Culture. Then organizations whose median score was above the median score of a particular dimension of organizational culture were classified as “high” on that dimension of organizational culture, for example in the

case of Synergetic Culture, such organizations were categorized as “Organizations with high score on Synergetic Culture”. Similarly, organizations below the median score of a particular dimension were labeled as “low” on that dimension of organizational culture, for example, “Organizations with low score on Synergetic Culture”. Organizations which had exactly the same score as the median score of a particular dimension of organizational culture were dropped from the analyses.

After categorization of the organizations on this basis, correlations as well as stepwise regression analyses were carried out. The stepwise regression analysis was carried out considering factors of **leadership** [9 factors: Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-Exception (Active), Management-by-Exception (Passive) and Laissez-faire] as independent variable, while dependent variable were 8 factors of **organizational learning** [8 factors: Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures and Detection of Errors].

Relationship between Leadership and Organizational Learning in organizations with high score on Synergetic Culture (N = 159)

Correlation Results

It was found from Table 3.17, that Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration and Contingent Reward of leadership had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Sharing of Information, Detection of Errors, except for Learning through Joint Ventures.

Management-by-Exception (Active) had significant positive correlation with only Formalized Learning Procedures, Formal Documentation Procedures and Detection of Errors.

Management-by-Exception (Passive) had significant negative correlation with only two dimensions of organizational learning, such as Emphasis on Interaction and Information Dissemination ($r = -.17, p < .05$), and Detection of Errors ($r = -.17, p < .05$). While Laissez-faire had significant negative correlation with most of the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Detection of Errors, except for Learning through Joint Ventures.

Stepwise Multiple Regression Analysis Result

It was observed from Table 3.18 that (1) Contingent Reward, Intellectual Stimulation and Idealized Influence (Attributed) were significant predictors of all the 8 dimensions of organizational learning; (2) the maximum variance, that is, 21% was explained by Idealized Influence (Attributed) of transformational leadership with respect to Formal Documentation Procedures while Contingent Reward of Transactional Leadership explained 19%, 16%, 13%, 12%, 9%, and 8% of the variance respectively of Emphasis on Interaction and Information Dissemination, Formalized Learning Procedures, Upgradation of Expertise, Sharing of Information, Detection of Errors, and Storage and Retrieval of Information; (3) Intellectual Stimulation of transformational leadership explained 2% of the variance in Formalized Learning Procedures; (4) Idealized Influence (Attributed) of transformational leadership explained 3% of the variance in Formal Documentation Procedures.

Thus, among the 9 dimensions of the independent variable, Contingent Reward of transactional leadership emerged as the best predictor ($\beta = .44, p < .00$) and

among the dimensions of the dependent variable, Emphasis on Interaction and Information Dissemination was the best predicted factor of organizational learning.

Relationship between Leadership and Organizational Learning in organizations with low score on Synergetic Culture (N= 96)

Correlation Results

It was found from Table 3.19, that Idealized Influence (Attributed) of leadership had significant positive correlation with only one dimension of organizational learning, i.e., Emphasis on Interaction and Information Dissemination.

Idealized Influence (Behaviour), Inspirational Motivation and Individualized Consideration did not have any significant correlation with the dimensions of organizational learning. Intellectual Stimulation had significant positive correlation with only one dimension of organizational learning, i.e., Emphasis on Interaction and Information Dissemination.

Contingent Reward had significant positive correlation with the dimensions of organizational learning, such as, Emphasis on Interaction and Information Dissemination and Formal Documentation Procedures.

Management-by-Exception (Active) had significant positive correlation only with Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information and Sharing of Information.

Management-by-Exception (Passive) had significant positive correlation with only one dimension of organizational learning, i.e., Learning through Joint Ventures. However, Laissez-faire did not have any significant correlation with any of the dimensions of organizational learning.

Stepwise Multiple Regression Analysis Results

It is evident from Table 3.20 that (1) Contingent Reward, Management-by-Exception (Active), Management-by-Exception (Passive) and Idealized Influence (Behaviour) were significant predictors of all the dimensions of organizational learning, except for Formalized Learning Procedures and Upgradation of Expertise; (2) the maximum variance, that is, 10% each was explained by Contingent Reward of transactional leadership and Idealized Influence (Behaviour) with respect to Emphasis on Interaction and Information Dissemination and Detection of Errors; (3) Management-by-Exception (Active) explained 5% and 4% of the variance in Storage and Retrieval of Information and Sharing of Information, respectively; (4) Contingent Reward of Transactional Leadership explained 5% of the variance in both Formal Documentation Procedures and Learning through Joint Ventures.

Therefore, it could be seen that among the 9 dimensions of the independent variable, Management-by-Exception (Passive) emerged as the best predictor ($\beta = .34$, $p < .00$) and among the dimensions of the dependent variable, Learning through Joint Ventures was the best predicted factor.

Relationship between Leadership and Organizational Learning in organizations with high score on Closed Culture (N= 101)

Correlation Results

As evident from Table 3.21, Idealized Influence (Attributed), Idealized Influence (Behaviour), Individualized Consideration, Contingent Reward and Management-by-Exception (Active) of leadership had significant positive correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation

Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Inspirational Motivation and Intellectual Stimulation had significant positive correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures and Sharing of Information, except for Learning through Joint Ventures and Detection of Errors.

Management-by-Exception (Passive) and Laissez-faire had significant negative correlation only with Detection of Errors.

Stepwise Multiple Regression Analysis Results

From Table 3.22, it can be observed that (1) Individualized Consideration, and Idealised Influence (Attributed) of transformational leadership and Contingent Reward, and Management-by-Exception (Active) of transactional leadership were significant predictors of all the dimensions of organizational learning, except for Learning through Joint Ventures; (2) the maximum variance, that is, 20% was explained by Contingent Reward of transactional leadership with respect to Formal Learning Procedures and it also explained 13% of the variance in Detection of Errors; (3) Individualized Consideration of transformational leadership explained 17% of the variance in Emphasis on Interaction and Information Dissemination, 15% of the variance each in both Upgradation of Expertise and Storage and Retrieval of Information and 13% of the variance in Formalized Learning Procedures; (4) Idealised Influence (Attributed) of transformational leadership explained 10% of the variance in Sharing of Information while Management-by-Exception (Active) explained 4% of the variance each in Formalized Learning Procedures, Emphasis on Interaction and Information Dissemination and Formal Documentation Procedures and 6% of the

variance each in both Storage and Retrieval of Information and Sharing of Information .

In short, Individualized Consideration and Contingent Reward emerged as the best predictors ($\beta = .39, p < .00$, in both the cases) and among the dimensions of the dependent variable, Upgradation of Expertise and Formal Documentation Procedures, respectively, were the best predicted variables.

Relationship between Leadership and Organizational Learning in organizations with low score on Closed Culture (N= 143)

Correlation Results

It can be observed from Table 3.23, that Idealized Influence (Attributed), Inspirational Motivation, Intellectual Stimulation and Contingent Reward of leadership had significant positive correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Idealized Influence (Behaviour) had significant positive correlation with some of the dimensions of organizational learning, such as, Formal Documentation Procedures, Sharing of Information and Detection of Errors while Individualized Consideration had significant positive correlation with only Formalized Learning Procedures and Formal Documentation Procedures.

Management-by-Exception (Active) did not have any significant positive correlation with any of the dimensions of organizational learning. Management-by-Exception (Passive) had significant negative correlation with only Emphasis on Interaction and Information Dissemination ($r = -.16, p < .05$).

Laissez-faire had significant negative correlation with Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Sharing of Information and Detection of Errors.

Stepwise Multiple Regression Analysis Result

From Table 3.24, it was evident that (1) Contingent Reward, and Intellectual Stimulation were significant predictors of all the dimensions of organizational learning, except for Learning through Joint Ventures; (2) the maximum variance, that is, 14% was explained by Contingent Reward of transactional leadership with respect to Emphasis on Interaction and Information Dissemination and it also explained 11%, 10%, 7%, 6% and 3% of the variance of Formal Documentation Procedures, Upgradation of Expertise, Formalized Learning Procedures, Storage and Retrieval of Information and Detection of Errors, respectively; (3) Intellectual Stimulation of transformational leadership explained 11% of the variance in Sharing of Information.

Among the 9 dimensions of the independent variable, Contingent Reward of transactional leadership emerged as the best predictor ($\beta = .37, p < .00$) and among the dimensions of the dependent variable, Emphasis on Interaction and Information Dissemination was the best predicted factor of organizational learning.

Relationship between Leadership and Organizational Learning in organizations with high score on Employee Oriented Culture (N= 57)

Correlation Results

As evident from Table 3.25, Idealized Influence (Attributed) of leadership had significant positive correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information,

Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Idealized Influence (Behaviour) had significant positive correlation with Formalized Learning Procedures, Emphasis on Interaction and Information Dissemination, Formal Documentation Procedures and Sharing of Information.

Inspirational Motivation had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Formal Documentation Procedures and Sharing of Information.

Intellectual Stimulation had significant positive correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Formal Documentation Procedures, Sharing of Information and Detection of Errors.

Individualized Consideration had significant positive correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures and Sharing of Information.

Contingent Reward had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Management-by-Exception (Active) had significant positive correlation with Formalized Learning Procedures, Emphasis on Interaction and Information Dissemination, Formal Documentation Procedures and Detection of Errors.

Management-by-Exception (Passive) had significant negative correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Emphasis on Interaction and Information Dissemination, Formal Documentation Procedures and Detection of Errors.

Laissez-faire had significant negative correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Stepwise Multiple Regression Analysis Results

It is evident from Table 3.26 that (1) Contingent Reward, Idealised Influence (Attributed) and Individualized Consideration were significant predictors of all the dimensions of organizational learning, except for Learning through Joint Ventures and Detection of Errors; (2) the maximum variance, that is, 30% was explained by Contingent Reward of transactional leadership with respect to Emphasis on Interaction and Information Dissemination and it also explained 22% of the variance in Sharing of Information; (3) Idealised Influence (Attributed) of transformational leadership explained 25% and 21% of the variance in Formal Documentation Procedures and Formalized Learning Procedures, respectively; (4) Individualized Consideration of transformational leadership explained 19% and 12% of the variance in Upgradation of Expertise and Storage and Retrieval of Information.

In short, among the 9 dimensions of the independent variable, Contingent Reward of transactional leadership emerged as the best predictor ($\beta = .55, p < .00$) and

among the dimensions of the dependent variable, Emphasis on Interaction and Information Dissemination was the best predicted factor. The second best predictor was Idealized Influence (Attributed) ($\beta = .50, p < .00$) and it predicted Formal Documentation Procedures.

Relationship between Leadership and Organizational Learning in organizations with low score on Employee Oriented Culture (N= 142)

Correlation Results

As it could be observed from Table 3.27, Idealized Influence (Attributed) of Leadership had significant positive correlation with most of the dimensions of organizational learning, except Sharing of Information.

Idealized Influence (Behaviour) had significant positive correlation with all the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures and Detection of Errors.

Inspirational Motivation had significant positive correlation with only two dimensions of organizational learning, such as, Emphasis on Interaction and Information Dissemination and Formal Documentation Procedures.

Intellectual Stimulation had significant positive correlation with the dimensions of organizational learning, such as, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Formal Documentation Procedures, Sharing of Information and Detection of Errors.

Individualized Consideration had significant positive correlation with all the dimensions of organizational learning, except for Sharing of Information and Learning through Joint Ventures.

Contingent Reward and Management-by-Exception (Active) had significant positive correlation with all the dimensions of organizational learning while Management-by-Exception (Passive) and Laissez-faire had no significant correlation with any of the dimensions of organizational learning.

Stepwise Multiple Regression Analysis Results

From the result presented in Table 3.28, it was found that (1) Contingent Reward, Management-by-Exception (Active) and Management-by-Exception (Passive) of transactional leadership and Idealized Influence (Behaviour) of transformational leadership were significant predictors of all the dimensions of organizational learning; (2) the maximum variance, that is, 11% was explained by Contingent Reward of transactional leadership with respect to Emphasis on Interaction and Information Dissemination and it also explained 8% of the variance in Formal Documentation Procedures; (3) Management-by-Exception (Active) explained 8%, 7%, 6% and 5% of the variance in Storage and Retrieval of Information, Sharing of Information, Upgradation of Expertise and Formalized Learning Procedures, respectively; (4) Management-by-Exception (Passive) explained 4% of the variance in Learning through Joint Ventures; (5) Idealised Influence (Behaviour) of transformational leadership explained 10% and 4% of the variance in Detection of Errors and Learning through Joint Ventures, respectively.

Among the 9 dimensions of the independent variable, Contingent Reward of transactional leadership emerged as the best predictor ($\beta = .33, p < .00$) and among the dimensions of the dependent variable, Emphasis on Interaction and Information Dissemination was the best predicted factor of organizational learning. The second

best predictor was Idealized Influence (Behaviour) ($\beta = .32, p < .00$) and it predicted Detection of Errors.

Relationship between Leadership and Organizational Learning in organizations with high score on Result Oriented Culture (N= 124)

Correlation Results

It can be observed from Table 3.29, that Idealized Influence (Attributed), Inspirational Motivation, Intellectual Stimulation and Individualized Consideration of leadership had significant positive correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Idealized Influence (Behaviour) and Contingent Reward had significant positive correlation with all the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures and Detection of Errors.

Management-by-Exception (Active) had significant positive correlation with Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, and Sharing of Information. Management-by-Exception (Passive) did not have significant positive correlation with the dimensions of organizational learning while Laissez-faire had significant negative correlation only with Detection of Errors ($r = -.22, p < .01$).

Stepwise Multiple Regression Analysis Results

From Table 3.30, it was found that (1) Contingent Reward, and Individualized Consideration were significant predictors of all the 8 dimensions of organizational learning; (2) the maximum variance, that is, 18% was explained by Contingent Reward of transactional leadership with respect to Emphasis on Interaction and Information Dissemination and it also explained 14%, 10%, 8% and 4% of the variance in Formal Documentation Procedures, Sharing of Information, Detection of Errors and Learning through Joint Ventures, respectively. Moreover, it also explained 9% of the variance each in both Upgradation of Expertise and Storage and Retrieval of Information; (3) Individualized Consideration of transformational leadership explained 14% of the variance in Formalized Learning Procedures.

In short, among the 9 dimensions of the independent variable, Contingent Reward of transactional leadership emerged as the best predictor ($\beta = .43, p < .00$) and among the dimensions of the dependent variable, Emphasis on Interaction and Information Dissemination was the best predicted factor of organizational learning.

Relationship between Leadership and Organizational Learning in organizations with low score on Result Oriented Culture (N= 27)

Correlation Results

As evident from Table 3.31, Idealized Influence (Attributed) of leadership had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Idealized Influence (Behaviour) had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction

and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, and Learning through Joint Ventures, except Sharing of Information and Detection of Errors.

Inspirational Motivation had significant positive correlation with all the dimensions of organizational learning.

Intellectual Stimulation had significant positive correlation with some of the dimensions of organizational learning, such as, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures and Sharing of Information.

Individualized Consideration had significant positive correlation with only Formalized Learning Procedures, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information and Learning through Joint Ventures.

Contingent Reward had significant positive correlation with some of the dimensions of organizational learning, such as, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Learning through Joint Ventures.

Management-by-Exception (Active) had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, and Sharing of Information, except Learning through Joint Ventures and Detection of Errors.

Management-by-Exception (Passive) did not have significant positive correlation with any of the dimensions of organizational learning while Laissez-faire had significant negative correlation only with Sharing of Information.

Stepwise Multiple Regression Analysis Results

From Table 3.32, it was found that (1) Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation and Individualized Consideration of transformational leadership and Management-by-Exception (Active) and Management-by-Exception (Passive) of transactional leadership were significant predictors of all the 8 dimensions of organizational learning; (2) the maximum variance, that is, 52% was explained by Inspirational Motivation of transformational leadership with respect to Formalized Learning Procedures and it also explained 45% of the variance in Upgradation of Expertise; (3) Idealized Influence (Attributed) of transformational leadership explained 51%, 48%, 31% and 9% of the variance in Emphasis on Interaction and Information Dissemination, Detection of Errors, Formal Documentation Procedures and Storage and Retrieval of Information respectively; (4) Idealized Influence (Behaviour) of transformational leadership explained 7% of the variance in Detection of Errors; (5) Individualized Consideration explained 28% of the variance in Learning through Joint Ventures; (6) Management-by-Exception (Active) explained 42% and 34% of the variance in Storage and Retrieval of Information and Sharing of Information, respectively; while Management-by-Exception (Passive) explained 10% of the variance in Detection of Errors.

Among the 9 dimensions of the independent variable, Inspirational Motivation of transformational leadership emerged as the best predictor ($\beta = .72, p < .00$) and among the dimensions of the dependent variable, Formalized Learning Procedures was the best predicted factor of organizational learning and the second best predictor was Idealized Influence (Attributed) ($\beta = .71, p < .00$) and the predicted factor was Emphasis on Interaction and Information Dissemination.

Relationship between Leadership and Organizational Learning in organizations with high score on Job Oriented Culture (N= 14)

Correlation Results

From Table 3.33, it can be noticed that Idealized Influence (Attributed) of leadership had significant positive correlation with only Emphasis on Interaction and Information Dissemination and Detection of Errors. Idealized Influence (Behaviour) had significant positive correlation with some of the dimensions of organizational learning, such as, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, and Formal Documentation Procedures.

Inspirational Motivation had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information and Detection of Errors while Intellectual Stimulation had significant positive correlation with only Formal Documentation Procedures and Sharing of Information.

Individualized Consideration, Contingent Reward, Management-by-Exception (Passive) and Laissez-faire had no significant correlation with any of the dimensions of organizational learning while Management-by-Exception (Active) had significant positive correlation with Storage and Retrieval of Information and Sharing of Information.

Stepwise Multiple Regression Analysis Results

As evident from Table 3.34, the stepwise regression analysis results revealed that (1) Inspirational Motivation, Idealized Influence (Behaviour), Management-by-Exception (Active) and Laissez-faire Leadership were significant predictors of all the dimensions of organizational learning, except for Learning through Joint Ventures;

(2) the maximum variance, that is, 61% was explained by Inspirational Motivation with respect to Detection of Errors and it also explained 56%, 49%, 46%, and 43% of the variance in Emphasis on Interaction and Information Dissemination, Formalized Learning Procedures, Storage and Retrieval of Information, and Upgradation of Expertise, respectively; (3) Idealized Influence (Behaviour) of transformational leadership explained 28% of the variance in Formal Documentation Procedures; (4) Management-by-Exception (Active) explained 44% of the variance in Sharing of Information while Laissez-faire explained 27% and 16% of the variance in Formalized Learning Procedures and Detection of Errors, respectively.

Among the 9 dimensions of the independent variable, Inspirational Motivation of transformational leadership emerged as the best predictor ($\beta = .84, p < .00$) and among the dimensions of the dependent variable, Detection of Errors was the best predicted factor of organizational learning. It was mostly the dimensions of transformational leadership which emerged as predictors of organizational learning.

Relationship between Leadership and Organizational Learning in organizations with low score on Job Oriented Culture (N= 152)

Correlation Results

It is evident from the results of the correlation presented in Table 3.35, that Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration and Contingent Reward dimensions of leadership had significant positive correlation with most of the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Management-by-Exception (Active) had significant positive correlation with Formalized Learning Procedures, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures and Detection of Errors.

Management-by-Exception (Passive) had significant negative correlation only with Emphasis on Interaction and Information Dissemination ($r = -.16, p < .05$).

Laissez-faire had significant negative correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors. It was observed that all the dimensions of Leadership, except Management-by-Exception (Passive), had significant positive relationship with most of the dimensions of organizational learning, except Learning through Joint Ventures.

Stepwise Multiple Regression Analysis Results

The results given in Table 3.36 showed that (1) Contingent Reward, Management-by-Exception (Active) and Laissez-faire were significant predictors of all the dimensions of organizational learning, except for Learning through Joint Ventures; (2) the maximum variance, that is, 20% was explained by Contingent Reward of transactional leadership with respect to Formal Documentation Procedures and it also explained 19%, 17%, 14%, 12%, and 9% of the variance in Emphasis on Interaction and Information Dissemination, Formalized Learning Procedures, Upgradation of Expertise, Storage and Retrieval of Information, and Detection of Errors, respectively. It also explained 12% of the variance in Sharing of Information; (3) Management-by-Exception (Active) explained 3% and 2% of the variance in Formal Documentation Procedures and Formalized Learning Procedures, respectively. It also explained 2% of the variance in Emphasis on Interaction and Information Dissemination; (4) Laissez-faire explained 2% of the variance in Emphasis

on Interaction and Information Dissemination. However, the relationship was negative ($\beta = -.16, p < .04$).

In short, among the 9 dimensions of the independent variable, Contingent Reward of transactional leadership emerged as the best predictor ($\beta = .40, p < .00$) and among the dimensions of the dependent variable, Formal Documentation Procedures was the best predicted factor.

Impact of Business Strategy on the relationship between Leadership and Organizational Learning

In order to study the impact of business strategy on the relationship between leadership and organizational learning, data of Set 2, that is, data regarding business strategy of the organizations were used to identify the organizations into “high” and “low” categories by using the following method. Median was computed for each of the three dimensions of business strategy – Defender, Analyzer and Prospector strategies. Then organizations whose median score was above the median score on a particular dimension of business strategy, were classified as “high” on that dimension of business strategy, for example in the case of Analyzer Strategy, such organizations were termed as “Organizations with high score on Analyzer Strategy” while those below as “Organizations with low score on Analyzer Strategy”. Organizations which had exactly the same median score as the overall median score of each dimensions were dropped from the analyses.

Thereafter, the same organizations (from Set 2), which belong to the different categories with regard to a particular dimension of business strategy, were identified from the data obtained from Set 1 and correlation and stepwise regression analyses were carried out on this set of data (Set 1). Stepwise multiple regression analysis was carried out considering factors of **leadership** [9 factors: Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-

Exception (Active), Management-by-Exception (Passive) and Laissez-faire], as independent variable, while dependent variable was factors of **organizational learning** [8 factors: Formalized Learning Procedures Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures and Detection of Errors].

Relationship between Leadership and Organizational Learning in organizations with high score on Defender Strategy (N= 93)

Correlation Results

Results of correlation amongst 9 dimensions of leadership and 8 dimensions of organizational learning, reported in Table 3.37, showed that Idealized Influence (Attributed) of Leadership had significant positive correlations with all the dimensions of organizational learning, except for Sharing of Information and Learning through Joint Ventures. Idealized Influence (Behaviour) had significant positive correlations with most of the dimensions of organizational learning, except for Upgradation of Expertise and Sharing of Information.

Inspirational Motivation had significant positive correlation with some of the dimensions of organizational Learning, such as, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Formal Documentation Procedures, Learning through Joint Ventures and Detection of Errors, while Intellectual Stimulation had significant positive correlation with all the dimensions of organizational learning, except for Learning through Joint Ventures.

Individualized Consideration had significant positive correlation with Formalized Learning Procedures and Formal Documentation Procedures. Contingent Reward had significant positive correlation with all the dimensions of organizational learning. Management-by-Exception (Active), Management-by-Exception (Passive)

and Laissez-faire had no significant correlation with any of the dimensions of organizational learning.

Stepwise Multiple Regression Analysis Results

Results of the stepwise multiple regression reported in Table 3.38 revealed that (1) Inspirational Motivation, Idealised Influence (Behaviour), Contingent Reward and Laissez-faire were significant predictors of all the 8 dimensions of organizational learning; (2) the maximum variance, that is, 17% was explained by Contingent Reward of transactional leadership with respect to Detection of Errors and it also explained 15%, 14%, 13%, 10%, and 7% of the variance in Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information and Sharing of Information respectively and it also explained 15% of the variance in Formal Documentation Procedures; (3) Idealised Influence (Behaviour) of transformational leadership explained 10% of the variance in Learning through Joint Ventures while Inspirational Motivation explained 3% of the variance in Formalized Learning Procedures and the relationship was negative; (4) Laissez-faire leadership explained 4% of the variance in Emphasis on Interaction and Information Dissemination and the relationship was negative.

In short, among the 9 dimensions of the independent variable, Contingent Reward of transactional leadership emerged as the best predictor ($\beta = .61, p < .00$) and among the dimensions of the dependent variable, Formalized Learning Procedures was the best predicted factor of organizational learning.

Relationship between Leadership and Organizational Learning in organizations with low score on Defender Strategy (N = 119)

Correlation Results

As presented in Table 3.39, Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Contingent Reward and Management-by-Exception (Active) of leadership had significant positive correlation with the dimensions of organizational learning, such as, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except Learning through Joint Ventures.

Individualized Consideration had significant positive correlation with only Formal Documentation Procedures and Detection of Errors while Management-by-Exception (Passive) and Laissez-faire had significant negative correlation with only Emphasis on Interaction and Information Dissemination.

Stepwise Multiple Regression Analysis Results

Results presented in Table 3.40 showed that (1) Idealised Influence (Attributed) and Idealised Influence (Behaviour), Contingent Reward, Management-by-Exception (Passive), Management-by-Exception (Active) and Laissez-faire were significant predictors of all the dimensions of organizational Learning, except Learning through Joint Ventures; (2) the maximum variance, that is, 18% was explained by Idealised Influence (Behaviour) with respect to Detection of Errors; (3) Idealised Influence (Attributed) of transformational leadership explained 17%, 10%, 9%, 6% and 4% of the variance in Formal Documentation Procedures, Sharing of Information, Formalized Learning Procedures, Storage and Retrieval of Information and Upgradation of Expertise, respectively; (4) Contingent Reward explained 14%

and 4% of the variance in Emphasis on Interaction and Information Dissemination and Detection of Errors, respectively; (5) Management-by-Exception (Active) explained 10% and 3% of the variance in Upgradation of Expertise and Formalized Learning Procedures, respectively while Management-by-Exception (Passive) explained 5% and 3% of the variance in Formal Documentation Procedures and Formalized Learning Procedures, respectively; (6) Laissez-faire explained 4% of the variance in Detection of Errors.

In short, among the 9 dimensions of the independent variable, Idealised Influence (Attributed) emerged as the best predictor ($\beta = .51, p < .00$) and among the dimensions of the dependent variable, Formal Documentation Procedures was the best predicted factor of organizational learning.

Relationship between Leadership and Organizational Learning in organizations with high score on Prospector Strategy (N= 108)

Correlation Results

The results reported in Table 3.41 showed that Idealized Influence (Attributed), Inspirational Motivation, Intellectual Stimulation and Individualized Consideration of leadership had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Idealized Influence (Behaviour) and Contingent Reward had significant positive correlation with all the dimensions of organizational learning.

Management-by-Exception (Active) had significant positive correlation with Formalized Learning Procedures, Emphasis on Interaction and Information

Dissemination, Storage and Retrieval of Information and Formal Documentation Procedures. However, Management-by-Exception (Passive) had no significant correlation with any of the dimensions of organizational learning.

Laissez-faire had significant negative correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures and Sharing of Information.

Stepwise Multiple Regression Analysis Results

The results of the stepwise multiple regression given in Table 3.42 showed that (1) Contingent Reward, Idealised Influence (Attributed) and Intellectual Stimulation were significant predictors of all the 8 dimensions of organizational learning; (2) the maximum variance, that is, 25% was explained by Contingent Reward of transactional leadership with respect to Formal Documentation Procedures and it also explained 12% and 8% of the variance in Detection of Errors and Learning through Joint Ventures, respectively; (3) Intellectual Stimulation of transformational leadership explained 19%, 18% and 16% of the variance in Upgradation of Expertise, Sharing of Information and Formalized Learning Procedures, respectively. It also explained 19% and 16% of the variance in Emphasis on Interaction and Information Dissemination and Storage and Retrieval of Information, respectively; (4) Idealised Influence (Attributed) of transformational leadership explained 4% and 3% of the variance in Emphasis on Interaction and Information Dissemination and Formalized Learning Procedures, respectively.

Intellectual Stimulation of transformational leadership emerged as the best predictor ($\beta = .43, p < .00$) and among the dimensions of the dependent variable, Upgradation of Expertise and Sharing of Information were the best predicted factors.

Relationship between Leadership and Organizational Learning in organizations with low score on Prospector Strategy (N= 118)

Correlation Results

It is evident from Table 3.43, that Idealized Influence (Attributed) of leadership had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Learning through Joint Ventures and Detection of Errors.

Idealized Influence (Behaviour) had significant positive correlation with Formalized Learning Procedures, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures and Detection of Errors.

Inspirational Motivation had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Learning through Joint Ventures and Detection of Errors.

Intellectual Stimulation had significant positive correlation with Formalized Learning Procedures, Emphasis on Interaction and Information Dissemination, Formal Documentation Procedures and Detection of Errors.

Individualized Consideration had significant positive correlation with Formal Documentation Procedures and Detection of Errors.

Contingent Reward had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and

Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures and Detection of Errors.

Management-by-Exception (Active) had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Sharing of Information and Learning through Joint Ventures. Management-by-Exception (Passive) and Laissez-faire had no significant correlation with any dimensions of organizational learning.

Stepwise Multiple Regression Analysis Results

The results presented in Table 3.44 showed that (1) Idealised Influence (Attributed), Idealised Influence (Behaviour), Contingent Reward, Management-by-Exception (Passive) and Management-by-Exception (Active) were significant predictors of all the 8 dimensions of organizational learning; (2) the maximum variance, that is, 15% was explained by Idealised Influence (Behaviour) with respect to Detection of Errors. It also explained 9% and 5% of the variance of Formalized Learning Procedures and Learning through Joint Ventures, respectively; (3) Idealised Influence (Attributed) of transformational leadership explained 8% and 6% of the variance in Formal Documentation Procedures and Storage and Retrieval of Information, respectively; (4) Contingent Reward explained 12% and 6% of the variance in Emphasis on Interaction and Information Dissemination and Upgradation of Expertise, respectively; (5) Management-by-Exception (Active) explained 6% of the variance in Sharing of Information while Management-by-Exception (Passive) explained 3% of the variance in Learning through Joint Ventures.

In short, among the 9 dimensions of the independent variable, Idealised Influence (Behaviour) emerged as the best predictor ($\beta = .39, p < .00$) and among the dimensions of the dependent variable, Detection of Errors was the best predicted factor.

Relationship between Leadership and Organizational Learning in organizations with high score on Analyzer Strategy (N= 88)

Correlation Results

The results of correlation presented in Table 3.45 showed that Idealized Influence (Attributed) and Inspirational Motivation of leadership had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Idealized Influence (Behaviour) had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures and Detection of Errors, except for Storage and Retrieval of Information.

Intellectual Stimulation and Contingent Reward had significant positive correlation with all the dimensions of organizational learning. Individualized Consideration had significant positive correlation with few dimensions of organizational learning, such as, Formalized Learning Procedures, Formal Documentation Procedures and Detection of Errors.

Management-by-Exception (Active) had no significant correlation with any of the dimensions of organizational learning while Management-by-Exception (Passive) had significant negative correlation with Emphasis on Interaction and Information Dissemination and Formal Documentation Procedures.

Laissez-faire had significant negative correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information

Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Stepwise Multiple Regression Analysis Results

The results reported in Table 3.46 showed that (1) Intellectual Stimulation, Contingent Reward and Management-by-Exception (Passive) were significant predictors of all the 8 dimensions of organizational learning; (2) the maximum variance, that is, 22% was explained by Contingent Reward of transactional leadership with respect to Formal Documentation Procedures and it also explained 21%, 15%, and 9% of the variance in Emphasis on Interaction and Information Dissemination, Detection of Errors and Learning through Joint Ventures, respectively; (3) Intellectual Stimulation of transformational leadership explained 20%, 17% and 12% of the variance in Sharing of Information, Formalized Learning Procedures and Storage and Retrieval of Information, respectively. It also explained 17% of the variance in Upgradation of Expertise; (4) Management-by-Exception (Passive) explained 5% of the variance in Learning through Joint Ventures.

Therefore, among the 9 dimensions of the independent variable, Contingent Reward of transactional leadership emerged as the best predictor ($\beta = .47, p < .00$) and among the dimensions of the dependent variable, Formal Documentation Procedures was the best predicted factor. It also predicted ($\beta = .46, p < .00$) the second best predicted factor, i.e., Emphasis on Interaction and Information Dissemination.

Relationship between Leadership and Organizational Learning in organizations with low score on Analyzer Strategy (N= 125)

Correlation Results

It can be observed from the results of correlation presented in Table 3.47, that Idealized Influence (Attributed) of leadership had significant positive correlation

with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Learning through Joint Ventures and Detection of Errors.

Idealized Influence (Behaviour), Inspirational Motivation, Contingent Reward and Management-by-Exception (Active) had significant positive correlation with all the dimensions of organizational learning.

Intellectual Stimulation had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors, except for Learning through Joint Ventures.

Individualized Consideration had significant positive correlation with Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures and Detection of Errors.

Management-by-Exception (Passive) had no significant correlation with any of the dimensions of organizational learning while Laissez-faire had significant negative correlation with Emphasis on Interaction and Information Dissemination and Sharing of Information.

Stepwise Multiple Regression Analysis Results

The results of stepwise multiple regression presented in Table 3.48 showed that (1) Idealised Influence (Attributed), Idealised Influence (Behaviour) and Management-by-Exception (Passive) were significant predictors of all the 8 dimensions of organizational learning; (2) the maximum variance, that is, 15% was

explained by Idealised Influence (Attributed) with respect to Formal Documentation Procedures and it also explained 12%, 11% and 9% of the variance in Emphasis on Interaction and Information Dissemination, Upgradation of Expertise and Storage and Retrieval of Information, respectively; (3) Idealised Influence (Behaviour) of transformational leadership explained 11%, 10% and 9% of the variance in Detection of Errors, Learning through Joint Ventures and Formalized Learning Procedures, respectively; (4) Management-by-Exception (Passive) explained 6% of the variance in Sharing of Information. Thus, among the 9 dimensions of the independent variable, Idealized Influence (Attributed) of transformational leadership emerged as the best predictor ($\beta = .39, p < .00$) and among the dimensions of the dependent variable, Formal Documentation Procedures was the best predicted factor of organizational learning.

Relationship between Leadership and Job Satisfaction

Direct relationship between Leadership and Job Satisfaction (N= 286)

In order to study the direct relationship between leadership and job satisfaction, correlations as well as stepwise regression analyses were carried out. The stepwise regression analysis was carried out considering factors of **leadership** [9 factors: Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception(Passive) and Laissez-faire], as independent variable, while dependent variable was factors of **job satisfaction** [3 factors: Intrinsic Satisfaction, Social Satisfaction and Extrinsic Satisfaction]

Correlation Results

It can be observed from Table 3.15, that Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation,

Individualized Consideration and Contingent Reward of leadership had significant positive correlation with all the dimensions of job satisfaction. Management-by-Exception (Active) had significant positive correlation with Intrinsic Satisfaction and Extrinsic Satisfaction.

Management-by-Exception (Passive) had significant negative correlation with Intrinsic Satisfaction and Social Satisfaction while Laissez-faire had significant negative correlation with all the dimensions of job satisfaction.

Stepwise Multiple Regression Analysis Results

As evident from Table 3.49, (1) Idealised Influence (Attributed), Intellectual Stimulation, and Laissez-faire, were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 15% was explained by Idealized Influence (Attributed), with respect to Intrinsic Satisfaction and it also explained 2% of the variance in Extrinsic Satisfaction; (3) Intellectual Stimulation explained 8% and 3% of the variance in Extrinsic and Intrinsic Satisfaction respectively and it also explained 3% of the variance in Social Satisfaction; (4) Laissez-faire Leadership explained 13% of the variance in Social Satisfaction, though the relationship was negative.

Therefore, among the 9 dimensions of the independent variable, Idealised Influence (Attributed) emerged as the best predictor ($\beta = .24$ $p < .00$) and among the dimensions of the dependent variable, Intrinsic Satisfaction was the best predicted factor of job satisfaction.

Moderating effect of Organizational Culture on the relationship between Leadership and Job Satisfaction

In order to study the moderating effect of organizational culture on the relationship between leadership and job satisfaction, the following method was

adopted. Median was computed for each of the five dimensions of organizational culture – Synergetic Culture, Closed Culture, Employee-Oriented Culture, Result-Oriented Culture and Job-Oriented Culture. Then organizations whose median score was above the median score of a particular dimension of organizational culture were classified as “high” on that dimension of organizational culture, for example in the case of Synergetic Culture, such organizations were categorized as “Organizations with high score on Synergetic Culture”. Similarly, organizations below the median score of a particular dimension were labeled as “low” on that dimension of organizational culture, for example “Organizations with low score on Synergetic Culture”. Organizations which had exactly the same score as the median score of a particular dimension of organizational culture were dropped from the analyses.

After categorization of the organizations on this basis, correlations as well as stepwise regression analyses were carried out. The stepwise regression analysis was carried out considering factors of **leadership** [**9 factors**: Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-Exception (Active), Management-by-Exception (Passive) and Laissez-faire], as independent variable, while dependent variable was factors of **job satisfaction** [**3 factors**: Intrinsic Satisfaction, Social Satisfaction and Extrinsic Satisfaction].

Relationship between Leadership and Job Satisfaction in organizations with high score on Synergetic Culture (N = 159)

Correlation Results

Results of correlation reported in Table 3.17, revealed that Idealized Influence (Attributed), Idealized Influence (Behaviour), Intellectual Stimulation and Contingent Reward had significant positive correlation with all the dimensions of job satisfaction.

Inspirational Motivation and Individualized Consideration had significant positive correlations with the dimensions of job satisfaction, such as, Intrinsic and Social Satisfaction.

Management-by-Exception (Active) and Management-by-Exception (Passive) had no significant correlation with any of the dimensions of job satisfaction. Laissez-faire had significant negative correlation with all the dimensions of job satisfaction.

Stepwise Multiple Regression Analysis Results

It can be observed from Table 3.50 that (1) Idealised Influence (Attributed), Intellectual Stimulation and Inspirational Motivation were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 16% was explained by Idealised Influence (Attributed) with respect to Intrinsic Satisfaction; (3) Inspirational Motivation explained 9% of the variance in Social Satisfaction; (4) Intellectual Stimulation explained 5% of the variance in Extrinsic Satisfaction.

In short, among the dimensions of the independent variable, Idealised Influence (Attributed) emerged as the best predictor ($\beta = .41, p < .00$) and among the dimensions of the dependent variable, Intrinsic Satisfaction was the best predicted factor.

Relationship between Leadership and Job Satisfaction in organizations with low score on Synergetic Culture (N = 96)

Correlation Results

The results of correlation reported in Table 3.19 showed that Idealized Influence (Attributed), Intellectual Stimulation and Contingent Reward had significant positive correlation with all the dimensions of job satisfaction. Idealized Influence (Behaviour) and Inspirational Motivation had significant positive

correlation with only Extrinsic Satisfaction. Individualized Consideration had significant positive correlation with only Extrinsic Satisfaction.

Management-by-Exception (Active) had no significant correlation with any of the dimensions of job satisfaction. Management-by-Exception (Passive) and Laissez-faire had significant negative correlation with Intrinsic and Social Satisfaction.

Stepwise Multiple Regression Analysis Results

The results of stepwise multiple regression reported in Table 3.51 showed that (1) Idealised Influence (Attributed), Idealised Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Management-by-Exception (Passive), and Contingent Reward were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 18% was explained by Management-by-Exception (Passive) with respect to Social Satisfaction, though the relationship was negative; (3) Idealised Influence (Attributed) explained 10% and 5% of the variance in Intrinsic and Social Satisfaction, respectively, while Idealised Influence (Behaviour) explained 4% of the variance in Intrinsic Satisfaction; (4) Intellectual Stimulation explained 9% of the variance in Intrinsic Satisfaction while Inspirational Motivation explained 4% of the variance in both Intrinsic and Social Satisfaction; (5) Contingent Reward explained 12% and 4% of the variance in Extrinsic and Social Satisfaction, respectively.

Thus, among the 9 dimensions of the independent variable, Idealised Influence (Attributed) emerged as the best predictor ($\beta = -.54, p < .00$) and among the dimensions of the dependent variable, Intrinsic Satisfaction was the best predicted factor of job satisfaction, though the relationship was negative.

Relationship between Leadership and Job Satisfaction in organizations with high score on Closed Culture (N = 101)

Correlation Results

It can be observed from the results of correlation presented in Table 3.21, that Idealized Influence (Attributed), Idealized Influence (Behaviour), Intellectual Stimulation, Individualized Consideration and Contingent Reward had significant positive correlation with all the three dimensions of job satisfaction. Inspirational Motivation had significant positive correlation with Intrinsic and Extrinsic Satisfaction.

Management-by-Exception (Active) had no significant correlation with any of the dimensions of job satisfaction. Management-by-Exception (Passive) and Laissez-faire had significant negative correlation with Intrinsic and Social Satisfaction.

Stepwise Multiple Regression Analysis Results

The results of stepwise multiple regression reported in Table 3.52 showed that (1) Idealised Influence (Attributed), Intellectual Stimulation, and Management-by-Exception (Passive) were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 20% was explained by Intellectual Stimulation with respect to Intrinsic Satisfaction and it also explained 11% and 8% of the variance in Social and Extrinsic Satisfaction, respectively; (3) Idealised Influence (Attributed) explained 3% of the variance in Intrinsic Satisfaction while Management-by-Exception (Passive) explained 5% of the variance in Social Satisfaction, though the relationship was negative.

Therefore, among the 9 dimensions of the independent variable, Intellectual Stimulation emerged as the best predictor ($\beta = .31, p < .00$) and among the dimensions of the dependent variable, Intrinsic Satisfaction was the best predicted factor.

Relationship between Leadership and Job Satisfaction in organizations with low score on Closed Culture (N = 143)

Correlation Results

Correlation results presented in Table 3.23 showed that Idealized Influence (Attributed), Intellectual Stimulation and Contingent Reward had significant positive correlation with Intrinsic, Social and Extrinsic Satisfaction. Idealized Influence (Behaviour) and Inspirational Motivation had significant positive correlation with Intrinsic and Social Satisfaction. Individualized Consideration had significant positive correlation only with Intrinsic Satisfaction.

Management-by-Exception (Active) had no significant correlation with any of the dimensions of job satisfaction. Management-by-Exception (Passive) and Laissez-faire had significant negative correlation with Intrinsic and Social Satisfaction.

Stepwise Multiple Regression Analysis Results

It is evident from Table 3.53 that (1) Idealised Influence (Attributed), Intellectual Stimulation, and Laissez-faire were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 18% was explained by Laissez-faire with respect to Social Satisfaction, though the relationship was negative and it also explained 4% of the variance in Intrinsic Satisfaction and in this case too relationship was negative; (3) Idealised Influence (Attributed) explained 16% and 4% of the variance in Intrinsic and Extrinsic Satisfaction, respectively while Intellectual Stimulation explained 4% of the variance in Social Satisfaction.

In short, among the dimensions of the independent variable, Laissez-faire leadership emerged as the best predictor ($\beta = -.35, p < .00$) and among the dimensions of the dependent variable, Social Satisfaction was the best predicted factor, though the relationship was negative.

Relationship between Leadership and Job Satisfaction in organizations with high score on Employee Oriented Culture (N = 57)

Correlation Results

As evident from Table 3.25, Idealized Influence (Attributed), Idealized Influence (Behaviour) and Inspirational Motivation of transformational leadership had significant positive correlation with Intrinsic and Social Satisfaction. Intellectual Stimulation and Contingent Reward had significant positive correlation with all the dimensions of job satisfaction while Individualized Consideration had significant positive correlation only with Intrinsic Satisfaction.

Management-by-Exception (Active) and Management-by-Exception (Passive) had no significant correlation with any of the dimensions of job satisfaction while Laissez-faire had significant negative correlation only with Intrinsic Satisfaction

Stepwise Multiple Regression Analysis Results

Results of stepwise multiple regression analysis presented in Table 3.54 indicate that (1) Idealised Influence (Behaviour) and Intellectual Stimulation were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 25% was explained by Idealised Influence (Behaviour) with respect to Intrinsic Satisfaction; (3) Intellectual Stimulation explained 10% and 8% of the variance in Social and Extrinsic Satisfaction, respectively. Moreover, Idealised Influence (Attributed) emerged as the best predictor ($\beta = .50, p < .00$) and among the dimensions of the dependent variable, Intrinsic Satisfaction was the best predicted factor of job satisfaction.

Relationship between Leadership and Job Satisfaction in organizations with low score on Employee Oriented Culture (N = 142)

Correlation Results

It can be observed from the correlation results reported in Table 3.27 that Idealized Influence (Attributed), Intellectual Stimulation and Contingent Reward had significant positive correlation with all the dimensions of job satisfaction. Idealized Influence (Behaviour) and Inspirational Motivation had significant positive correlation only with Extrinsic Satisfaction. Individualized Consideration and Management-by-Exception (Active) had significant positive correlation with Intrinsic and Extrinsic Satisfaction.

Management-by-Exception (Passive) had significant negative correlation with Intrinsic and Social Satisfaction while Laissez-faire had significant negative correlation with all the dimensions of job satisfaction.

Stepwise Multiple Regression Analysis Results

From Table 3.55, it could be inferred that (1) Idealized Influence (Behaviour), Intellectual Stimulation, and Laissez-faire were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 16% was explained by Laissez-faire with respect to Social Satisfaction, though the relationship was negative; (3) Idealized Influence (Behaviour) explained 14% of the variance in Extrinsic Satisfaction; (4) Intellectual Stimulation explained 13% and 3% of the variance in Intrinsic Satisfaction and Social Satisfaction, respectively. Idealized Influence (Behaviour) emerged as the best predictor ($\beta = .38, p < .00$) and among the dimensions of the dependent variable, Extrinsic Satisfaction was the best predicted factor.

Relationship between Leadership and Job Satisfaction in organizations with high score on Result Oriented Culture (N = 124)

Correlation Results

As evident from the results presented in Table 3.29, Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration and Contingent Reward had significant positive correlation with all the dimensions of job satisfaction.

Management-by-Exception (Active) had significant positive correlation only with Extrinsic Satisfaction while Management-by-Exception (Passive) and Laissez-faire had significant negative correlation with Intrinsic and Social Satisfaction.

Stepwise Multiple Regression Analysis Results

It is evident from Table 3.56 that (1) Idealised Influence (Attributed), Management-by-Exception (Passive), and Contingent Reward were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 23% was explained by Idealised Influence (Attributed) with respect to Intrinsic Satisfaction and it also explained 8% of the variance in Social Satisfaction; (3) Management-by-Exception (Passive) explained 19% of the variance in Social Satisfaction, though the relationship was negative; (4) Contingent Reward explained 14% of variance in Extrinsic Satisfaction. Idealised Influence (Attributed) emerged as the best predictor ($\beta = .48, p < .00$) and among the dimensions of the dependent variable, Intrinsic Satisfaction was the best predicted factor.

Relationship between Leadership and Job Satisfaction in organizations with low score on Result Oriented Culture (N = 27)

Correlation Results

The results of correlation presented in Table 3.31 showed that Idealized Influence (Attributed) of Leadership had significant positive correlation with Intrinsic and Extrinsic Satisfaction. Idealized Influence (Behaviour) and Individualized Consideration had significant positive correlation only with Extrinsic Satisfaction. Inspirational Motivation had no significant correlation with any of the dimensions of job satisfaction. Intellectual Stimulation, Contingent Reward and Management-by-Exception (Active) had significant positive correlation with Intrinsic and Social Satisfaction.

Management-by-Exception (Passive) and Laissez-faire had significant negative correlation with Intrinsic and Social Satisfaction.

Stepwise Multiple Regression Analysis Results

It can be observed from the results reported in Table 3.57, that (1) Idealised Influence (Attributed), Intellectual Stimulation and Laissez-faire were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 58% was explained by Intellectual Stimulation with respect to Intrinsic Satisfaction. It also explained 39% of the variance in Social Satisfaction; (3) Idealised Influence (Behaviour) explained 30% of the variance in Extrinsic Satisfaction; (4) Laissez-faire explained 10% of the variance each in both Intrinsic and Social Satisfaction, though the relationship was negative. Moreover, Intellectual Stimulation emerged as the best predictor ($\beta = .63, p < .00$) and among the dimensions of the dependent variable, Intrinsic Satisfaction was the best predicted factor.

Relationship between Leadership and Job Satisfaction in organizations with high score on Job Oriented Culture (N = 14)

Correlation Results

Correlation results presented in Table 3.33 revealed that Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Individualized Consideration, Contingent Reward, Management-by-Exception (Active) and Management-by-Exception (Passive) of Leadership had no significant correlation with any of the dimensions of job satisfaction. Intellectual Stimulation had significant positive correlation with Intrinsic and Social Satisfaction. Laissez-faire had significant negative correlation only with Social Satisfaction.

Thus it was seen that only Intellectual Stimulation had significant positive correlation with Intrinsic and Social Satisfaction while Laissez-faire leadership had significant negative correlation with Social Satisfaction.

Stepwise Multiple Regression Analysis Results

It can be seen from Table 3.58, that (1) Intellectual Stimulation and Laissez-faire were significant predictors of all the dimensions of job satisfaction, except Extrinsic Satisfaction; (2) the maximum variance, that is, 57% was explained by Intellectual Stimulation with respect to Intrinsic Satisfaction; (3) Laissez-faire explained 38% of the variance in Social Satisfaction, though the relation was negative. Intellectual Stimulation emerged as the best predictor ($\beta = .75, p < .00$) and among the dimensions of the dependent variable, Intrinsic Satisfaction was the best predicted factor.

Relationship between Leadership and Job Satisfaction in organizations with low score on Job Oriented Culture (N = 152)

Correlation Results

Results provided in Table 3.35 showed that Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration and Contingent Reward of leadership had significant positive correlation with all the dimensions of job satisfaction.

Management-by-Exception (Active) had significant positive correlation only with Extrinsic Satisfaction while Management-by-Exception (Passive) had significant negative correlation with Social Satisfaction. Laissez-faire had significant negative correlation with all the dimensions of job satisfaction.

Stepwise Multiple Regression Analysis Results

It can be inferred from Table 3.59, that (1) Idealised Influence (Behaviour), Intellectual Stimulation, and Laissez-faire were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 18% was explained by Intellectual Stimulation with respect to Intrinsic Satisfaction. It also explained 12% and 10% of the variance in Extrinsic and Social Satisfaction, respectively; (3) Idealised Influence (Behaviour) explained 3% of the variance in Intrinsic Satisfaction; (4) Laissez-faire explained 3% of the variance in both Social and Extrinsic Satisfaction, though the relationship was negative. Intellectual Stimulation emerged as the best predictor ($\beta = .30, p < .00$) and among the dimensions of the dependent variable, Extrinsic Satisfaction was the best predicted factor.

Impact of differences in Organizational Learning processes on the relationship between Leadership and Job Satisfaction

In order to study the impact of differences in organizational learning processes on the relationship between leadership and job satisfaction, the following method was adopted. Composite score of the dimensions of organizational learning was calculated by adding all the dimensions of organizational learning. Thereafter, median was computed for this composite score. Then organizations whose individual median scores were above the median of the composite score of all organizations were categorized as “Organizations with high focus on organizational learning processes” while those below were categorized as “Organizations with low focus on organizational learning processes”. Organizations which had exactly the same median score were dropped from the analyses.

After categorization of the organizations on this basis, correlation and stepwise regression analysis were carried out. Stepwise multiple regression was carried out considering factors of **leadership** [**9 factors**: Idealized influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-Exception (Active), Management-by-Exception (Passive) and Laissez-faire], as independent variable, while dependent variable was factors of **job satisfaction** [**3 factors**: Intrinsic Satisfaction, Social Satisfaction and Extrinsic Satisfaction.]

Relationship between Leadership and Job Satisfaction in organizations with high score on Organizational Learning (N = 124)

Correlation Results

Results of correlation reported in Table 3.60 showed that Idealized Influence (Attributed), Inspirational Motivation of Leadership had significant positive correlation with Intrinsic and Social Satisfaction. Idealized Influence (Behaviour),

Individualized Consideration and Management-by-Exception (Active) had no significant correlation with any of the dimensions of job satisfaction. Intellectual Stimulation and Contingent Reward had significant positive correlation with Intrinsic, Social and Extrinsic Satisfaction.

Management-by-Exception (Passive) had significant negative correlation only with Social Satisfaction while Laissez-faire had significant negative correlation with Intrinsic and Social Satisfaction.

Stepwise Multiple Regression Analysis Results

It can be observed from Table 3.61, that (1) Contingent Reward and Laissez-faire were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 13% was explained by Laissez-faire with respect to Social Satisfaction, though the relationship was negative; (3) Contingent Reward explained 9% and 4% of the variance in Intrinsic and Social Satisfaction, respectively. Contingent Reward emerged as the best predictor ($\beta = .30, p < .00$) and among the dimensions of the dependent variable, Intrinsic Satisfaction was the best predicted factor.

Relationship between Leadership and Job Satisfaction in organizations with low score on Organizational Learning (N = 162)

Correlation Results

It can be inferred from Table 3.62, that Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration and Contingent Reward of Leadership had significant positive correlation with all the dimensions of job satisfaction. Management-by-Exception (Active) had significant positive correlation only with Intrinsic Satisfaction.

Management-by-Exception (Passive) had significant negative correlation with Intrinsic and Social Satisfaction while Laissez-faire had significant negative correlation with all the dimensions of job satisfaction.

Stepwise Multiple Regression Analysis Results

The results of stepwise multiple regression presented in Table 3.63 indicated that (1) Idealized Influence (Attributed), Idealized Influence (Behaviour), Individualized Consideration, Intellectual Stimulation, and Laissez-faire were significant predictors of all the dimensions of job satisfaction; (2) the maximum variance, that is, 22% was explained by Idealized Influence (Attributed) with respect to Intrinsic Satisfaction; (3) Idealized Influence (Behaviour) explained 9% of the variance in Extrinsic Satisfaction; (4) Intellectual Stimulation explained 3% of the variance in Intrinsic Satisfaction while Individualized Consideration explained 2% of the variance in Intrinsic Satisfaction; (5) Laissez-faire explained 12% of the variance in Social Satisfaction, though the relationship was negative. Idealized Influence (Attributed) emerged as the best predictor ($\beta = .42, p < .00$) and among the dimensions of the dependent variable, Intrinsic Satisfaction was the best predicted factor.

Discussion

Relationship between Leadership and Organizational Learning

In order to test the specific hypothesis regarding the relationship between leadership and organizational learning, correlation and stepwise multiple regression were carried out. The results obtained are discussed below-

Direct relationship between Leadership and Organizational Learning

In the case of studying the direct relationship between leadership and organizational learning, the results of correlation (Table 3.15) revealed that most of

the dimensions of leadership, apart from Management-by-Exception (Active) have significant positive relationship with most of the dimensions of organizational learning, except Detection of Errors. This implied that organizations whose top managements use these different styles of leadership fostered organizational learning. It should be noted that these different styles comprise aspects of both transformational and transactional leadership. However, there is significant negative relationship in the case of Laissez-faire leadership style. This revealed that if an organization's management adopts this leadership style, which is the most inactive style, then there would be less focus on organizational learning in such organizations as the leader would neither be able to influence the subordinates nor be a role model who shows and leads the organizational members to adopt and utilize certain mechanisms which will facilitate organizational learning.

Further exploration of this relationship by using the stepwise multiple regression (Table 3.16) showed that Idealized Influence (Behaviour) and Idealized Influence (Attributed) of transformational leadership and Contingent Reward of transactional leadership are the significant predictors of all the dimensions of organizational learning. Contingent Reward of transactional leadership involves an interaction between leader and followers and it is basically based on rewarding the followers in exchange of successful completion of targeted goals. Therefore, organizational members, who value such rewards would engage in organizational learning mechanism such as interaction and information distribution and other such mechanisms like formal documentation, upgradation of skills and knowledge, etc., which contribute to the successful implementation of organizational learning. Idealized Influence is also another predictor of some of the dimensions of organizational learning. This leadership style helps the leader to provide a role model to the followers/organizational members and set examples of sacrifice of private interest for the welfare of the organization. This motivates the members to think beyond themselves and engage in mechanisms which will help the organization to adopt organizational learning mechanisms. Earlier research have revealed high correlation between Contingent Reward behaviours and transformational leadership

behaviours which implied that “they are likely to exist in the same individuals in different amounts and intensities” (Bass, 1998) and in this study also high correlation is found between them ($r = 0.82, p < .00$). Together, Contingent Reward and Idealized Influence (Attributed) explained the maximum variance of Formal Documentation Procedures. These are procedures which help the organizational members to arrange information systematically for current and future use. Contingent Reward, on its own, explained the maximum variance of Emphasis on Interaction and Information Dissemination which helps members to exchange as well as disseminate information and knowledge efficiently through the interactions amongst the organizational members. This finding is in line with the argument that moderate level of transformational leadership would encourage such behaviours (Jansen, Vera, & Crossan, 2009) which facilitate organizational learning. Therefore, it could be concluded that leadership styles which are effective in facilitating organizational learning encompass combination of these two aspects of leadership. Such leadership behaviours are also found in Quinn’s (1988) “competing values model” which argues that executives must develop “behavioural complexity” or the ability to play competing leadership roles simultaneously (Denison, Hooijberg & Quinn, 1995).

Therefore, the results of correlation and regression support **Hypothesis 1A** which stated that there will be positive relationship between leadership comprising of both transactional and transformational styles and organizational learning as well as **Hypothesis 1B** which proposed that there will be negative relationship between Laissez-faire leadership style and organizational learning.

Moderating effect of Organizational Culture on the relationship between Leadership and Organizational Learning

With respect to the moderating effect of organizational culture on the relationship between leadership and organizational learning, correlation and multiple regression results were compared between organizations which have high score and low score on a particular dimension of organizational culture.

In the case of organizations with high Synergetic Culture, it was observed that most of the dimensions of leadership have significant positive relationship with most of the dimensions of organizational learning, except Learning through Joint Ventures. In these organizations, the organizational culture is congenial in nature, where the management has care and concern for the welfare of the employees and the employees, in return, put their maximum effort to execute their tasks. In such organizations, the top management's leadership styles, comprising of aspects of both transformational and transactional leadership are effective in fostering organizational learning. Therefore, these leadership styles in conjunction with high Synergetic Culture contribute to the successful practice of organizational learning processes. However, there are significant negative relationships of Management-by-Exception (Passive) and Laissez-faire leadership styles with the dimensions of organizational learning. This revealed that if an organization's management adopts these ineffective and passive leadership styles, then there would be less focus on organizational learning in such organizations, despite the presence of such conducive culture. This may be due to the fact that, institutionalization and effective functioning of organizational learning mechanisms require active role of the leaders. Moreover, according to Pithers (1985), lack of appropriate reinforcements following desired behaviour results in a decline in performance over time. Therefore, in the case of these two passive leadership behaviours, in which there is least involvement and guidance by the leaders, organizational learning mechanisms are not facilitated. These inactive leadership styles have overriding effect as compared to the organizational culture. Even such conducive organizational culture is not able to produce positive impact of leadership in fostering organizational learning in the organizations.

In organizations with low Synergetic Culture, only Idealized Influence (Attributed) and Intellectual Stimulation of transformational leadership have significant positive relationship with Emphasis on Interaction and Information Dissemination and only Idealized Influence (Behaviour) was the significant predictor of Detection of Errors. In the case of transactional leadership, all the dimensions have

significant correlation and are also the predictors of some of the dimensions of organizational learning. Moreover, for those, which have significant relationships, the correlation coefficients and the beta values are quite low as compared to those in the case of high Synergetic Culture. This may be due to the fact that in organizations with low Synergetic Culture, which is not very conducive to work, the top management is not able to influence the organizational members to contribute to organizational learning while in organizations with high Synergetic Culture, the top management encourages the employees to be open about their ideas and opinions and at the same time there are care and concern for the members both at the professional and personal levels. Therefore, the leaders are able to influence the members to take risks and contribute their maximum capacity for the success of the organization. Thus, it could be concluded that, the Synergetic Culture has enhanced the relationship between leadership and organizational learning in organizations with high Synergetic Culture as compared to low Synergetic Culture organizations.

In Closed Culture, there is emphasis on abiding the rules and regulations of the organization, the members are secretive and closed and therefore, the organization may not be enthusiastic towards interaction with the outside world. Hence, it is quite possible that present competing business scenario, which necessitates dynamic interaction and importation of latest technical know-how and expertise might create problems for such organizations. However, such organizations might function well for short duration, especially in guarded environment (such as public sector organizations, in some instances). Moreover, such culture helps in maintaining efficiency within the organizations as organizational members are clear about the rules and regulations to be followed while carrying out their duties. Such culture, therefore, has positive connotation for the organization. In such culture, it was found that transformational and transactional leadership styles contribute positively and strongly in facilitating organizational learning in organizations with high score on Closed Culture. It was also observed that in most cases there is no significant relationship with Learning through Joint Ventures. This may be due to the high Closed Culture prevalent in such organizations. Closed culture limits the

interaction of organizations with the outside world, and this culture influences in such a way that it impedes an important aspect of organizational learning such as, learning through collaboration with other organizations through joint ventures. While in the case of organizations with low focus on Closed Culture, though some of the dimensions of both transformational and transactional leadership have significant relationships with dimensions of organizational learning but it is mostly Contingent Reward of transactional leadership and only Intellectual Stimulation of transformational leadership which are the significant predictors of most of the dimensions of organizational learning. This may be due to the fact that, Contingent Reward behaviour of transactional leadership style helps the leader to provide clear cut goals and objectives to the followers and provide rewards to them in exchange for successful completion of targeted goals. Hence, due to the clarity of the roles which they have to perform in order to accomplish the goals and also the reward associated with its successful completion, organizational members engage in organizational learning mechanism such as interaction and information distribution and other such mechanisms like formal documentation, upgradation of skills and knowledge, etc., which contribute to the successful implementation of organizational learning.

However, for those dimensions of leadership that have significant relationships with organizational learning, the correlation coefficients and the beta values are quite low in the case of organizations with low Closed Culture as compared to those of high Closed Culture. But, in the case of Laissez-faire leadership, the negative relationship with organizational learning is stronger in the case of organizations with low Closed Culture as compared to high Closed Culture because the former culture may not be facilitating Laissez-faire leadership style as such culture has components of openness, trust and less importance to procedures to be followed in organizations. From the above results of correlation and multiple regression, it was found the Closed Culture *enhance* the relationship between leadership and organizational learning in organizations with high Closed Culture as most of the correlation-coefficient and beta values are higher in this case as compared to low Closed Culture organizations. In the context of the present research,

enhance implies that the relationship between leadership and organizational learning has been strengthened due to the presence of Closed Culture. Similar finding has also been observed in earlier studies that leaders with transactional behaviors will work within the current culture that follows existing norms, rules, and procedures which can be described as closed and rule bound and reinforces institutionalized learning (Nahavandi, 1993; Vera & Crossan, 2004). This may be due to the fact that transactional leaders, by their very nature, provide clear direction and roles that the subordinates have to perform in order to achieve the target. Hence, the organizational members are aware of the clear-cut procedures and rules prevalent in the organization.

In the case of Employee-Oriented Culture, it could be concluded that the Employee-Oriented Culture which focuses on the welfare of the organizational members and take care of their need and problems, both at the personal and professional level have *enhanced* the relationship between leadership and organizational learning in organizations with high Employee-Oriented Culture as most of the correlation coefficients and beta values of multiple regression are higher in this case as compared to organizations with low Employee-Oriented Culture. In organizations with high Employee-Oriented culture, leaders basically have greater influence in facilitating organizational learning by showing his or her willingness to sacrifice private interests for the good of the organization and also by treating each employee as an individual with needs, abilities, and aspirations different from those of others and helping them to develop their strong sides by spending a lot of time in guiding and training them. Therefore, there are beliefs amongst the employees that since the organizations give priority to their welfare and progress, so they, in return, should also give their best by following the orders of the bosses and contribute in meeting the goals of the organizations.

With respect to both Result-Oriented Culture and Job-Oriented Culture, there was asymmetrical distribution when the sample was divided into high and low category. It was N = 124 in the case of high Result-Oriented Culture while N = 27 in

organizations with low Result-Oriented Culture. Similarly, in organizations with high Job Oriented culture, $N = 14$ while in the case of low Job Oriented culture $N = 152$. According to the central limit theorem, the data will be normally distributed when the sample size is large enough ($N > 30$) (Gilbert & Churchill, 2001; Stuart, 1984). However, in both these cases the sample size of the small group was less than 30. It was also observed that, the smaller sample produced higher values of correlation coefficients and beta than those of the larger sample. These results would be affected due to these differences in sample sizes. So it would be improper to compare the results as one could not say with confidence that these differences in the results were due to the impact of the variable and not due to the difference in sample size. Consequently, these results were dropped from final discussion.

Finally, from the results obtained after exploring the moderating effect of organizational culture on the relationship between leadership and organizational learning, it could be concluded that in most cases, organizational culture enhanced the relationship between leadership and organizational learning in organizations with strong culture such as high Synergetic Culture, Closed Culture, and Employee Oriented Culture as compared to organizations which are low on these dimensions of organizational culture. It was also observed that the variance explained by leadership behaviours is higher in the case of high Employee-Oriented culture than other organizational culture dimensions. This implied that Employee-Oriented culture was the most conducive culture in which leaders played important role in fostering organizational learning processes. And it is both transformational leadership and transactional leadership styles which play the vital roles. These findings support **Hypotheses 1C**, which stated that there will be high positive relationship between leadership (transformational and transactional) and organizational learning in organizations with strong organizational culture as compared to those with weak organizational culture. It was observed from earlier researches, that a culture which comprise of components like, trust, commitment, concern for the welfare of employees, tolerance for mistakes and psychological safety (DeLong & Fahey, 2000; Gupta, Iyer & Aronson, 2000; Senge, Kleiner, Roberts, Ross, Roth & Smith, 1999;

Popper & Lipshitz, 2000) creates a congenial work environment that facilitates the learning processes in the organizations. Moreover, transformational leadership would be effective in such culture because the leaders influence their subordinates by giving personal attention to their needs, providing challenges and learning opportunities and also exhibit trust, respect, and some tolerance for mistakes that occur as learning proceeds (Bass & Avolio, 1994). The leaders also encourage the followers to come up with new ideas and solutions to problems and motivate them to transcend self interest for the growth and benefit of the organization as a whole. Moreover, it was observed that Contingent Reward of transactional leadership also plays an important role in facilitating organizational learning. This leadership style involves interaction between leader and followers, which is basically based on rewarding the followers in exchange of successful completion of targeted goals. Therefore, organizational members, who value such rewards would engage in organizational learning mechanism such as interaction and information distribution and other mechanisms like formal documentation procedure, upgradation of skills and knowledge, etc., which contribute to the successful implementation of organizational learning. Hence, such leadership (transformational and transactional) in conjunction with this kind of culture will enhance organizational learning as the right kind of conducive environment and guidance are prevalent.

But it was quite surprising, that in organizations with high Closed Culture which is characterized by closed and secretive behaviour amongst the members and emphasis on following rules and regulations of the organization, enhance the relationship between leadership and organizational learning. However, further exploration of the mean scores of the dimensions of organizational learning dimensions revealed that these mean scores are higher in the case of low Closed Culture (M = 6.02, SD = 1.50; M = 6.14, SD = 1.63; M = 6.37, SD = 1.42; M = 6.13, SD = 1.65; M = 6.46, SD = 1.44; M = 6.49, SD = 1.64; M = 6.81, SD = 1.94; M = 6.42, SD = 1.78) as compared to high Closed culture (M = 5.30, SD = 1.58; M = 5.85, SD = 1.61; M = 5.79, SD = 1.54; M = 5.75, SD = 1.75; M = 5.73, SD = 1.44; M = 5.70, SD = 1.66; M = 6.34, SD = 2.24; M = 6.18, SD = 1.86). The result of t-test of the means of the 8 dimensions of organizational

learning of organizations with high and low Closed Culture showed that there are significant differences in 4 out of 8 dimensions of organizational learning ($t = -3.58, p < .00$; $t = -2.99, p < .00$; $t = -3.91, p < .00$; $t = -3.66; p < .00$), namely, Formalized Learning Procedures, Emphasis on Interaction and Information Dissemination, Formal Documentation Procedures and Sharing of Information, respectively. It could therefore, be inferred that in high Closed Culture organizations, leadership has overpowering impact and in fact, Closed culture is likely to be maintained only when leaders exercise high level of control within the organization. However, this kind of stringent control may not help in ensuring the practice of organizational learning as evident from the comparison of the means of organizational learning dimensions across high and low Closed Culture organizations. A greater impact of transactional leadership style in high Closed Culture was also observed. This may be due to the fact that such leaders are able to get the required behaviours from their subordinates through transactional relations, that is, for example, exchange of rewards in lieu of work accomplished. Moreover, such transactional leaders foster rule-based ways of doing things (Bass, 1998) in order to maintain efficiency in the organizations. They stimulate the flow of learning in the organization by assigning a strong value to organizational rules, procedures, and past experiences (Friedlander, 1983).

In the case of the relationship between Laissez-faire and organizational learning, stronger negative relationships were observed in high Synergetic and Employee-Oriented relationship but in the case of Closed Culture such strong relationship was found in the case of low Closed Culture. These findings partially support **Hypotheses 1D**, i.e., there will be high negative relationship between Laissez-faire leadership and organizational learning in organizations with strong organizational culture, as compared to those with weak organizational culture. It was also noted that the Management-by-Exception (Passive) of transactional leadership has similar negative relationship with organizational learning because this passive form of leadership only intervenes, often reluctantly, when specific problems become apparent and their attention is drawn towards them. Consequently, subordinates tend to avoid initiating change or taking risks, preferring to maintain status quo

(Bass, 1985). Similar negative relationship was also found in earlier studies (Coad & Berry, 1998). Thus, it can be concluded that these styles of leadership do not foster organizational learning even in strong conducive culture.

Impact of Business Strategy on the relationship between leadership and organizational learning

In order to find out the impact of business strategy on the relationship between leadership and organizational learning, correlation and multiple regression results were compared between organizations which had high score and low score on a particular dimension of business strategy.

In the case of organizations with high Defender Strategy, it was found that most of the dimensions of leadership, except Management-by-Exception (Active), Management-by-Exception (Passive) and Laissez-faire leadership styles have significant positive relationship with all the dimensions of organizational learning. The positive relationships are basically found with dimensions of transformational leadership and Contingent Reward of transactional leadership. In an organization which adopts Defender Strategy, the main focus is on maintaining stable position in the market and to stay ahead of the competitors in their domain of expertise (Miles et al., 1978). This requires a top management, which could influence the subordinates to function efficiently. It is basically transformational leadership behaviours which could motivate their subordinates to serve and achieve more than they are originally expected to and were made more aware of the organization's needs for their unique skills and talents (Bass, 1990) and thus contribute to effective functioning of the organizations. Moreover, Contingent Reward also plays important role as it is most effective when the learning is taking place through structured and organized process. This is also basically true in organizations that adopt Defender Strategy, which focus more on learning and generating knowledge from internal sources (Sabherwal & Sabherwal, 2007) and whose focus is on maintaining a stable position in the market. While in the case of organizations with low Defender Strategy, again

transformational leadership has major influence on organizational learning. However, transactional leadership also plays its role in facilitating organizational learning, though in a limited manner as compared to transformational leadership. The best predicted factor is Detection of Error, which basically involves scrutinizing the current procedures and trying to detect any errors or mistakes. This, in a way, contributes to improving their current reserve of knowledge repertoire, as Defender Strategy relies on internal knowledge than external (Ribbens, 1997).

It could be observed from the results that maximum variance is explained in the case of organizations low focus on Defender Strategy, that is, 18% as compared to 17% in the case of high focus on Defender Strategy. However, a closer observation of the other variance explained by the leadership styles with respect to the eight dimensions of organizational learning revealed a mixed result. This means that, out of the 8 dimensions of organizational learning, higher variance is explained by leadership in the case of organizations with high Defender Strategy while the other 4 dimensions of organizational learning have higher variance explained by leadership in organizations with low Defender Strategy. It could be assumed from these results that there was a mixed impact of Defender strategy on the relationship between leadership and organizational learning. Also, in the case of high Defender Strategy, it is Contingent Reward behavior of transactional leadership, which explained high variance while in the case of low Defender Strategy organizations it is Idealized Influence (Behaviour) behavior of transformational leadership.

With respect to impact of Prospector Strategy, it could be observed that, higher variance is explained by leadership styles with respect to the dimensions of organizational learning, in organizations with high Prospector Strategy as compared to low Prospector Strategy. Moreover, maximum variance, that is, 25% is explained in organizations with high Prospector strategy, while 15% of variance is explained in the case of organizations with low Prospector Strategy. It is Contingent Reward behavior of transactional leadership which explained higher variance in high Prospector Strategy organizations, while in the case of low Prospector Strategy

organizations it is Idealized Influence (Behavior) of transformational leadership. But, it should be noted that Contingent Reward behaviour has high correlation with transformational leadership behaviour indicating that such behaviours are likely to be present in the same person in different degree (Bass, 1998).

Therefore, in organizations with Prospector Strategy which usually focuses on seeking new market-product opportunities (Doty, Glick & Huber, 1993), innovativeness and flexibility in technology (Hambrik, 1983) and introduction of new products and brands ahead of competitors (Venkatraman, 1989), it is an interplay of transformational and transactional leadership styles which is effective in encouraging their subordinates to be innovative and creative by questioning assumptions, instilling trust and commitment in the followers (Bass, Avolio, Jung, & Berson, 2003) as well as rewarding them when they engage in such innovative activities for the organization. Therefore, in the present age, where increasing globalization and turbulent and complex environment are forcing organizations to rethink and rework on their strategies to compete and survive, Prospector Strategy seems to function well in conjunction with such leadership styles, as described above, to foster organizational learning that helps the organization to come out with innovative solutions and products. This aspect is quickly becoming the only “sustainable competitive advantage” (DeGues, 1988; Stata, 1989).

In the case of Analyzer Strategy, it could be observed that, higher variance is explained by leadership styles with respect to the dimensions of organizational learning, in organizations with high Analyzer Strategy as compared to those with low Analyzer Strategy. Moreover, maximum variance, that is, 22% is explained in organizations with high Analyzer Strategy, while 15% of variance is explained in the case of organizations with low Analyzer Strategy. Thus, it could be concluded that there was effect of Analyzer strategy on this relationship. It is a combination of both transactional and transformational leadership which had influence on the different dimensions of organizational learning.

Analyzer Strategy focuses on searching deeper for the cause or root of a problem and tries to find out the best possible solution for the organization (Miller & Friesen, 1984). It also refers to the extent of “internal consistency achieved in the overall resource allocation for the achievement of chosen objectives” (Grant & King, 1982). Such strategy is effective when leaders focus on encouraging the followers to question the existing assumptions on the basis of which solutions are formulated, motivate the subordinates to be innovative and creative in their approach towards finding solutions, and at the same time provides goals which can be achieved. This encompasses behaviours of both styles of leadership, that is, transformational and transactional.

Therefore, from the results obtained above, it could be concluded that business strategy affected the relationship between leadership and organizational learning. High Prospector and Analyzer strategies had more influence as compared to those low on these strategies. These findings support **Hypothesis 1E**. However, as mixed result was obtained in the case of Defender strategy, **Hypothesis 1F**, is only partially supported. Therefore, it could be concluded that organizational learning would be fostered in organizations which adopt strategies that focus on innovation and seek new opportunities in the market. Such organizations are future oriented and think ahead of their contemporaries and thus focus on improving market position faster than its competitors. They try to search deeper for the root cause of problems and find the best possible solutions for the benefit of the organization. However, achieving this state involves the active role of top management as it is the top management of the organizations, which envisions the goals of an organization and is one of the key players in deciding the course and path which should be followed by an organization to achieve its goals. It was found in this study that, in organizations with high focus on Analyzer and Prospector strategies, it was mostly Intellectual Stimulation behaviour of leaders which play the vital role because such leaders constantly examine the present state of affairs, and do not see the existing situation as an unchangeable fact. Leaders are also characterized by the ability to make their followers to “think differently”, and work creatively. Thus, in

organizations which adopt Analyzer and Prospector strategies, such leadership behaviour works well to foster organizational learning. While in organizations with high Defender Strategy, it was Contingent Reward behaviour of transactional leadership which had the major effect on organizational learning. These findings are in line with the argument given by Nahavandi (1993) that transformational leaders will choose a prospector or an analyzer position, whereas transactional leaders will select a defender strategy. These strategic decisions, all outputs of learning, are what shape ongoing learning. A prospector strategy is likely to promote in individuals the desire for new challenges and opportunities, along with the habit of flexibility when acquiring new learning. In contrast, a defender strategy is likely to promote risk aversion in individuals and to create incentives to achieve efficiency and stability in the market.

In a way, organizational learning and strategy have bi-directional relationship. Organizational learning both determines and is determined by strategy (Ribbens, 1997). The knowledge created through organizational learning provides the base for strategy formulation (Lant & Montgomery, 1987) and strategy in a way defines the information that should be acquired which would help the organization to survive and remain successful. Shrivastava and Grant (1985) also found that certain types of organizational learning systems [6 organizational learning systems as identified by Shrivastava (1983)] fit best with certain types of strategic decision models. This fit between organizational learning and strategy is important because it could enhance organizational performance (Kaplan & Norton, 2004).

Relationship between Leadership and Job Satisfaction

In order to test the specific hypothesis regarding the relationship between leadership and job satisfaction, correlation and stepwise multiple regression were carried out. The results obtained from the analyses are discussed below-

Direct relationship between Leadership on Job Satisfaction

It was observed that most of the dimensions of leadership have significant positive relationship with most of the dimensions of job satisfaction, except Management-by-Exception (Passive) and Laissez-faire leadership styles which have significant negative relationship with job satisfaction. Results of stepwise multiple regression also revealed that it is basically Idealized Influence (Attributed) and Intellectual Stimulation of transformational leadership which significantly and positively contributed to job satisfaction while Laissez-faire significantly and negatively contributed to job satisfaction.

Job satisfaction is related to the feelings of employees towards their work. This can be influenced by factors such as the quality of their relationship with their supervisor or employer, the quality of the physical environment in which they work, or the degree of fulfillment in their work (Yi Wu, 2009). In the present study, it was found that different leadership styles comprising of aspects of both transformational and transactional leadership have positive effect on job satisfaction. Transformational leadership leaders show concern for the welfare of the employees, instill confidence and encourage them to give up personal gain for the achievement of higher goals; therefore the subordinates feel a sense of satisfaction because of these attitudes and behaviours shown by the leader towards them. This, in a way, encourages them to work for the benefit of the organization and, in turn, provides them some sense of job satisfaction. On the other hand, a transactional leader is more likely to offer some form of satisfaction, when the employees are given reward or recognition, in return for successful completion of assigned tasks. Such relationship between leadership and job satisfaction has also been found in earlier researches (Daniels & Bailey, 1999; Gaertner, 2000; Kim, 2002). However, there were significant negative relationships of Management-by-Exception (Passive) and Laissez-faire leadership styles with the dimensions of job satisfaction. This implied that the more frequently the top management displayed both these ineffective and passive leadership styles, the employees experienced less job satisfaction. This may be due to

the fact that subordinates expect leaders to be more active and direct them and give feedback in order to carry out their functions in an efficient manner. Inactive and passive leaders are likely to be indifferent to the genuine needs and concerns of employees. Such leaders are also likely to perform their duties just to meet the day-to-day demands of the organization. Consequently, in the long run, such indifference will frustrate the subordinates and hence, they are likely to experience less job satisfaction. In the similar line, Frischer and Larsson (2000) state that superiors' lack of initiative and action can have detrimental effects on subordinates' job satisfaction and efficiency.

These results supported Hypothesis **2A and 2B**, which stated that there will be positive relationship between leadership (transactional and transformational) and job satisfaction and there will be negative relationship between laissez-faire leadership and job satisfaction.

Moderating effect of Organizational Culture on the relationship between Leadership and Job Satisfaction

For analyzing the moderating effect of organizational culture on the relationship between leadership and job satisfaction, correlation and multiple regression results were compared between organizations which had high score and low score on a particular dimension of organizational culture.

In the case of Synergetic Culture it was found that in the organizations with high score on Synergetic Culture, most of the dimensions of transformational leadership and only Contingent Reward of transactional leadership, have significant positive relationship with most of the dimensions of job satisfaction. In Synergetic culture, the management has concern for the employees, both in the job and outside and the employees in return are willing to sacrifice for the interest of the organization. According to Koh, Steers and Terborg (1995), a transformational leadership style strengthens employees' sense of belongingness and meets

employees' needs for self-actualization; therefore in this kind of culture, which creates the ambience for subordinates to feel a sense of belongingness to the organization, transformational leadership would work best. Further, results from regression analysis revealed that transformational leadership behaviours had more influence in enhancing the job satisfaction of employees as compared to any other styles of leadership. Moreover, Idealised Influence (Attributed) has more influence on Intrinsic Satisfaction, which was expected because this leadership behaviour mainly works on the inner self on individuals by providing role models which the followers can identify with and follow and in this way work towards the achievement of goals envisioned by such leaders, which in return provides satisfaction to the followers.

However, there was significant negative relationship of Management-by-Exception (Passive) and Laissez-faire leadership style with the dimensions of job satisfaction. This revealed that under these leadership styles, which involved the least intervention and inactive role by leaders, subordinates will experience less job satisfaction, despite the conducive culture that is prevalent in these organizations. Such negative relationships between these passive leadership styles and job satisfaction have also been observed in other studies (Bass, 1990; Judge & Piccolo, 2004).

In organizations with low focus on Synergetic culture characterized by less concern for employees welfare and in which the employees are also not willing to put extra effort for the organization, it was observed that both transactional and transformational leadership would be effective in influencing the job satisfaction of subordinates, especially Extrinsic Satisfaction. Such culture is not conducive and employees would not feel a sense of belongingness. Therefore, in this non-conducive culture, interplay of these two leadership styles may work because while transformational leadership style motivates followers by appealing to higher ideals and moral values (Burns, 1978), transactional leadership clarifies the performance criteria or articulate what are expected from the employee and what employees will receive in return (Burns, 1978). However, it was also found that Idealized Influence

(Behaviour) and Inspirational Motivation, are significant predictors and the former has negative effect only on Intrinsic Satisfaction and the latter has negative impact on Intrinsic Satisfaction as well as Social Satisfaction. This may be due to the fact that such transformational leadership styles are confusing and ambiguous (Hinkin & Scriesheim (2008b). Hence, subordinates who look up to the leaders to provide them clear-cut direction and timely guidance, are not able to experience Intrinsic Satisfaction as they could not perform their work due to the ambiguity in their roles. The subordinates could not experience Social Satisfaction also, as they receive only motivation from their leaders to carry out their work but do not receive adequate support and recognition. Moreover, in such a culture characterized by less concern for employees' welfare and the employees are also not willing to put extra effort for the organization, such leadership behaviours do not have the expected effect on the subordinates as the subordinates feel that there is no congruence between the leadership and the culture prevalent and therefore, they experience less satisfaction, especially Intrinsic Satisfaction and Social Satisfaction. There was significant negative relationship of Laissez-faire leadership styles with the dimensions of job satisfaction. Under this passive form of leadership, leaders avoid decision-making and supervisory responsibility (Bass, 1999; Flood, Hannan, Smith, Turner, West, & Dawson, 2000), followers are left to work their own way out, hence subordinates who look up to the leaders to lead towards the expected goals would experience less job satisfaction as they receive neither guidance nor support while executing their roles in the organizations.

A comparison of the correlation coefficients and beta values between the high and low Synergetic Culture revealed that all the positive beta values were higher in the case of organizations with low Synergetic Culture as compared to high Synergetic Culture. Thus, Synergetic Culture enhanced the relationship between some dimensions of leadership and job satisfaction in the case of low Synergetic Culture organizations. This was quite contrary to the belief that in organizations with less congenial work environment and less concern for the employees, the employees would experience less satisfaction. This may be due to the fact that the leaders were

able to provide job satisfaction to the followers through their exemplary behaviors and by serving as role models and also by stimulating the employees to think and come out with their own views and mindsets. All these combined factors had compounding effect on the subordinates and they were able to experience satisfaction despite the kind of non-conducive culture prevalent in these organizations. But it should be noted that, though the subordinates are experiencing job satisfaction in such culture, there is no concrete evidence that the performance of the organization is improving. This is a characteristic observed in many public sector organizations where job satisfaction of the employees is quite high but the performance of the organization is not up to the mark.

In the case of organizations with high Closed Culture, most of the dimensions of transformational leadership and only Contingent Reward of transactional leadership had significant positive relationship with all the dimensions of job satisfaction. This implied that organizations in which there is more focus on following the rules and procedures and organizational members are closed and secretive, it is mostly transformational leadership that plays important role in generating job satisfaction among the subordinates. As transactional leadership along with transformational leadership have impact on job satisfaction in organizations high on Closed Culture, partial explanation can be observed in the findings where it has been reported that transactional leadership works well in the rule-bound organizations (Nahavandi, 1993).

However, there were significant negative relationships of Management-by-Exception (Passive) and Laissez-faire leadership styles with two dimensions of job satisfaction - Intrinsic and Social Satisfaction. These leadership styles are the most ineffective styles. Such leaders are neither sufficiently motivated nor adequately skilled to perform supervisory duties (Bass, 1998; Den Hartog et al., 1997), hence, subordinates who look up to the leaders to lead them towards the expected goals would experience less job satisfaction. Moreover, subordinates typically assume that the leader will thoughtfully consider all relevant factors before making decisions,

rather than reprimanding subordinates when deviations happen (Dorfman & Howell, 1997). So employees feel less satisfied when leaders use this kind of leadership style, i.e., Management-by-Exception (Passive). It was also found in a study by Chen, Beck and Amos (2005) that nursing faculty members experienced less job satisfaction when nursing deans and directors used this style of leadership.

In organizations with low focus on Closed Culture characterized by less adherence to rules and regulations and the organizational members were less secretive, transformational leadership and Contingent Reward of transactional leadership were effective in influencing the job satisfaction of subordinates because the followers were motivated to serve and achieve more than they were originally expected to and they were also made more aware of the organization's needs for their unique skills and talents (Bass, 1990). This realization of the organization's need for their ability induced a sense of satisfaction with their work. But Management-by-Exception (Passive) and Laissez-faire style did not facilitate job satisfaction as these leaders avoid decision-making and supervisory responsibility and therefore employees experienced lack of guidance and support and hence were less satisfied with their work.

It was also observed from the above results that the significant correlation coefficients and beta values are higher in the case of organizations with high Closed Culture. This implied that Closed Culture enhanced the relationship between job satisfaction and transformational leadership style behaviours in high Closed Culture. It has been found in earlier researches also that this leadership style affect the job satisfaction of subordinates (Bass, 1990; Judge & Piccolo, 2004). Moreover, in such closed culture, leaders has more control over activities of the organizations as well the subordinates and is, therefore, able to influence the attitudes and feelings of the organizational members. In low Closed Culture, it enhanced the relationship only between Social Satisfaction and Laissez faire, though there is a negative relationship. However, this is not the case in the other two dimensions of job satisfaction. Since a

mixed result is obtained, it can be concluded that Closed Culture is a quasi-moderator for this relationship between leadership and job satisfaction.

In organizations with high focus on Employee-Oriented Culture in which the top management has high concern and care for the welfare and growth of the subordinates, it was observed that transformational leadership behaviours like Idealized Influence, Inspirational Motivation, Intellectual Stimulation and Contingent Reward of transactional leadership were effective in influencing the job satisfaction of subordinates as these leadership styles worked in the most effective manner in such culture. It was found in earlier research also that leaders who behaved as role models through their expertise and talents and who defined clear tasks and goals for subordinate and provide rewards for positive performance enhanced the satisfaction of employees (Shieh et al., 2001). But Laissez-faire style did not facilitate job satisfaction as it had negative relationship with most of the dimensions of job satisfaction. This leadership style is the most ineffective style as leaders provide the least guidance and interventions. So subordinates would experience less job satisfaction as they had least expectation that they would either be recognized or rewarded for their performance. Such negative impact of Laissez faire leadership style is supported by the longitudinal study of Yammarino, Spangler and Bass (1993). While in organizations with low focus on Employee-Oriented Culture it was observed that both transactional and transformational leadership are effective in influencing the job satisfaction of subordinates. This is due to the fact that such “constructive” leadership styles are able to satisfy the expectations and needs of the organizational members through their guidance, support and role clarity and appropriate reward for the activities of the subordinates. Hence, the employees experience job satisfaction, though the culture is not as favourable as high Employee-Oriented Culture.

From comparison of the above results of the effect of high and low Employee-Oriented Culture on the relationship between leadership and job satisfaction, it was observed that beta values were higher in the case of Extrinsic Satisfaction (predicted

variable) for organizations with low Employee-Oriented Culture, but in the case of organizations with high Employee-Oriented Culture, Intrinsic and Social Satisfaction (predicted variables) had higher values. This implied that Employee-Oriented Culture enhanced the relationship between these two aspects of job satisfaction and leadership in high Employee-Oriented Culture. Therefore, in organizations where there is more care and concern for the welfare of the subordinates, the organizational members experience more satisfaction derived through accomplishment of their work as they prefer to reciprocate for the positive attitude shown by the organization towards them. They also experience satisfaction through social affiliations with the organizational members as they belong to the same organization which treats them all fairly. However, in low Employee-Oriented Culture, it enhanced the relationship between Extrinsic Satisfaction and transformational leadership. This may be due to the culture in which the management shows less concern for the organizational members and hence the employees experience satisfaction only from the pay and fringe benefits that they receive. But these employees do not derive satisfaction from the work which they are performing, as in the case of employees in organizations with high focus on Employee-Oriented Culture who experienced satisfaction through the work that they perform. This finding basically reflects the difference in the quality of job satisfaction experienced by subordinates working in different organizational culture. Since a mixed result was obtained, it could be concluded that Employee-Oriented culture was a quasi-moderator for the relationship between leadership and job satisfaction.

In the case of Result-Oriented and Job-Oriented Cultures, as stated in the earlier section discussing the relationship between leadership and organizational learning, there are significant differences in the sample size of the samples in the high and low categories of each of the two remaining dimensions of organizational culture. Hence, the differences in the result of correlation and regression could not be completely attributed to the impact of the variables. Moreover, according to the central limit theorem, data will be normally distributed when the sample size is large enough ($N > 30$) (Gilbert & Churchill, 2001; Stuart, 1984). However, in both these cases

the sample size of the small groups was less than 30. This caused another problem in inferring the result. Therefore, the results of these two dimensions of organizational culture were dropped from the discussion, though the results have been reported in the result section.

Finally, from the results obtained after exploring the moderating effect of organizational culture on the relationship between leadership and job satisfaction, it could be concluded that organizational culture enhanced the relationship between leadership and job satisfaction in organizations with organizational cultures such as high Closed Culture and Employee-Oriented Culture, though mixed results were obtained. Therefore, it could be concluded that these cultures played the role of quasi moderator. While, organizational culture enhanced the relationship in low Synergetic Culture. Moreover, it is a combination of transactional and transformational leadership styles which play the vital roles of influencing the job satisfaction of the employees. Employees tend to be more satisfied when their managers are good leaders. Considerable research has shown that leader behavior can have profound and consistent influence on several facets of employee satisfaction (Yi Wu, 2009). Earlier researches have shown that organizational culture play a key role in job satisfaction (Adkins & Caldwell, 2004; Johnson & McIntyre, 1998; Lund, 2003; Silverthorne, 2004) and in this study also, it was observed that organizational cultures have effect on the relationship between leadership and job satisfaction.

These results partially support **Hypothesis 2C**, which stated that there will be high positive relationship between leadership (transformational and transactional) and job satisfaction in organizations with strong organizational culture as compared to those with weak organizational culture as high positive relationship were found in strong as well as weak cultures. In the present context, strong culture implied that the norms and values in the organization were well established and had profound effect on the employees. **Hypothesis 2D** is also partially supported as high negative relationship between laissez-faire leadership and job satisfaction are found in

organizations with strong organizational culture as well as those with weak organizational culture.

Impact of Organizational Learning on the relationship between Leadership and Job Satisfaction

In order to study the effect of organizational learning on the relationship between leadership and job satisfaction, correlation and multiple regression results were compared between organizations which had high score and low score on a composite score of all the dimensions of organizational learning.

In the case of organizations with high focus on organizational learning, it was found that Contingent Reward of transactional leadership plays the most significant role while Idealized Influence (Attributed), Inspirational Motivation and Intellectual Motivation of transformational leadership play limited role in influencing the job satisfaction of employees working in organizations with high focus on organizational learning. However, there were few significant negative relationships of Management-by-Exception (Passive) and Laissez-faire leadership styles with the job satisfaction because such leaders exercise little control over the group and there is ambiguity in the roles to be carried out by the subordinates. Moreover, such leaders tackle their work without participating in the process, which lowers the sense of belongingness and commitment and also the job satisfaction level of employees.

While in organizations with low focus on organizational learning, it was observed that though these organizations are not giving much emphasis to the learning processes at the organizational level, still transformational leadership style has been able to influence the job satisfaction of employees. This may be due to the fact that such leaders influence their followers through strong personal identification with the leader, joining in a shared vision of future, or going beyond the self-exchange of rewards for compliance (Hater & Bass, 1988). Therefore the followers had a sense of belongingness and are ready to dedicate their effort and

service for the growth of the organization which in turn affected their satisfaction with their work. Steers and Rhodes (1978) note that “a more considerate leadership style facilitates job satisfaction” (cited in Zaccaro, Craig & Quinn, 1991).

A comparison of the above results showed that higher variance of job satisfaction was explained by leadership dimensions in organizations with low focus on organizational learning and it was basically transformational leadership which explained the variance. This result indirectly implied that in the present business scenario in India, in organizations with high focus on organizational learning, mechanisms have already been established in the system and people have been experiencing job satisfaction. Therefore, the intensity of this relationship may not be strong (though it is significant). In this way, it partially supports **Hypothesis 2E**, which assumed that there will be high impact of leadership (transactional and transformational) on job satisfaction in organizations with high focus on organizational learning while the reverse will be true in organizations with low focus on organizational learning.

Conclusion

This study tried to answer the questions raised in the beginning of the chapter regarding (1) what are the different leadership styles which have impact on organizational learning and the nature of their relationships, (2) what are the certain kinds of organizational culture which are prerequisite for organizational learning and what is its impact on organizational learning, (3) how do the different business strategies adopted by the organization affect organizational learning, and finally (4) what is the impact of these variables on job satisfaction? Therefore hypotheses were framed in reference to these questions.

The first two hypotheses were in reference to the relation between leadership and organizational learning and it was hypothesized that there will be positive relationship between leadership (transformational and transactional) and

organizational learning and secondly, there will be negative relationship between laissez-faire leadership and organizational learning. It was found that Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation and Individualized Consideration of transformational leadership and Contingent Reward of transactional leadership had significant positive relationship and were also the significant predictors of most of the dimensions of organizational learning. Most of the recent studies on the relationship between leadership and organizational learning (Senge, 1990; Edmondson, 1999; Lipshitz et al., 2002, Amitay et al., 2005; Chang & Lee, 2007; Garcia-Morales et al., 2008) have focused more on the transformational leaders and its positive influence on organizational learning while less attention has been given to the impact of Transactional leadership. But, recent theoretical developments have emphasized the importance of a contingent approach toward leadership and organizational learning (Vera & Crossan, 2004). In the present study it was found that Contingent Reward behaviour of transactional leaders also play important role in influencing organizational learning. This can be attributed to the fact that contingent reward leadership enables followers to perceive the consistency in leadership behaviour as well as the reliability of their leaders (Zagorsek, Dimovski & Skerlavaj, 2009). The leader secures transactional agreements with the followers by providing a clear picture about the requirements of the job and rewards them in exchange for satisfactorily carrying out the assignment. From the perspective of followers, the consistent honouring of transactional agreements builds trust, dependability, and perceptions of consistency with regard to leaders, each of which form a basis for effective group performance (Avolio & Bass, 1991). This ensures the subordinates to engage in activities which facilitate the learning process. Such finding has also been observed in a study by Zagorsek et al. (2009), which found the effect of contingent reward leadership on organizational learning was practically equally strong as the effect of transformational leadership. These results support the more recent theoretical developments of Vera and Crossan (2004) that proposed a contingent approach toward leadership and organizational learning.

The effectiveness of the leadership style found in the present research, that is, a combination of some of the behaviours and attributes of both transactional and transformational leadership styles, also have special cultural significance for Indian organizations, as similar style of leadership termed as “nurturant-task” had been identified by Sinha (1979) in Indian work settings. Such leadership style is exemplified by strong emphasis on task accomplishment, high standard of performance, clarity of expected roles intermingled with affection and care for the subordinate (Sinha, 1979). Though this concept is quite old and moreover, there have been tremendous changes in the Indian work settings during these years, still the results of the present study provide evidence for the effectiveness of “nurturant-task” leadership style in Indian organizations even in the present scenario.

In reference to the role or impact of organizational culture, it was found that organizational culture enhanced the relationship between leadership and organizational learning in organizations with strong culture such as high Synergetic Culture, Closed Culture, and Employee Oriented Culture as compared to organizations with weak cultures. Such cultures are characterized by care and concern for employees, willingness to take risks, encouragements to come out with ideas and opinions as well as following the rules and regulations of the organizations. Such kind of culture which facilitates organizational learning has also been found in earlier studies (Senge et al., 1999; Von Krogh, 1998; Gupta et al., 2000; Perez Lopez, Montes Peon & Vazquez Ordas, 2004). It is also an interplay of both transformational leadership and transactional leadership styles, which played the vital roles. The creation of a learning culture depends on the strategic leader (Hurley & Hult, 1998; McGill & Slocum, 1993) and the extent to which leader can synchronize transactional and transformational behaviors, authoritarian and participative systems, and task and relationship orientations (Schein, 1992). In this study also, it was found that leaders use a combination of both transformational and transactional leadership styles, in accordance to the organizational culture prevalent in the organizations, to influence the behaviours of the organizational members to contribute to organizational learning.

Another important question was regarding the how the different strategies adopted by the organization affect organizational learning. It was found that high Prospector and Analyzer strategies had more influence as compared to those low on these strategies. Such results were supported by earlier studies. For example, Pedler, Boydell, & Burgoyne (1989) have stressed the importance of analytical approach to strategy that contribute to learning while Senge (1990) have pointed out that future oriented strategy is critical for the creation of learning organization. Watkins and Marsick (1996) have also emphasized the importance of proactive approach in establishing learning organization. However, mixed result was obtained in the case of Defender Strategy. Therefore, it could be concluded from these results that organizational learning would be fostered in organizations whose strategies focus on innovation, seek new opportunities and is future oriented and think ahead of contemporaries. Such organizations also try to search deeper for the root cause of problems and find the best possible solutions and is focused on improving market position faster than its competitors. Other studies have also found that there is impact of organizational strategy on organizational learning and knowledge management. However, achieving this state involves the intervention of top management because it is the top management of the organizations which envisions the goals of an organization and is one of the key players in deciding the course and path which should be followed by an organization to achieve its goals. It was observed in this study that in the case of Analyzer and Prospector strategies, it was Intellectual Stimulation of transformational leadership while in the case of Defender Strategy, it was Contingent Reward of transactional leadership which played the important roles in facilitating organizational learning and these findings are in line with similar argument given by Nahavandi (1993).

The final question was in respect to the impact of all these variables on job satisfaction. It was found that both transformational and transactional leadership have significant positive relationship with job satisfaction. This is in line with earlier findings (Daniels & Bailey, 1999; Gaertner, 2000; Yi Wu, 2009) which found that leadership behaviors related to inspiring teamwork, challenging tradition, enabling

others, setting examples, and rewarding high performance have been found to have significant effects on role clarity, self-efficacy, and job satisfaction.

Attempt was also made to study the impact of organizational learning on the relationship between leadership and job satisfaction as it has been observed in the literature that there is usually an assumption that organizational learning leads to positive outcome. Chiva and Alegre (2009) have found a positive impact of organizational learning on job satisfaction. However, the result of this study partially supported the hypothesis that there will be high impact of leadership (transactional and transformational) on job satisfaction in organizations with high focus on organizational learning while the reverse will be true in organizations with low focus on organizational learning. Contingent Reward of transactional leadership played the most significant role in organizations with high focus on organizational learning as it provides role clarity and rewards the members when they perform their assigned jobs and so the members experienced satisfaction. Such transactional approach is necessary to convince people that learning, both at the individual and organizational level is beneficial at all levels (Zagorsek et al., 2009) while in organization with low focus on organizational learning, transformational leader was instrumental in providing satisfaction among its subordinates and this relationship was stronger because transformational leaders by their very behaviour of instilling the confidence, trust and belief in the subordinates is able to provide job satisfaction to the employees, despite the less opportunity for learning, which may be present in such organizations.

Study 2B

The results of the previous two studies (Study 1 and Study 2A) reported in Chapter 2 and Chapter 3 have answered most of the research questions raised in Chapter 1. These two studies were quantitative in nature. However, in order to explore further about the nature of organizational learning taking place in the organizations in Indian settings, as well as, the role of the various contextual factors, a qualitative study using interview method was conducted. One of the main objectives of qualitative study is to explore a concept in-depth and to obtain detailed descriptions and views on the concerned topic (Creswell, 1998).

The results reported in Study 2A showed that there were positive relationships between leadership (transformational and transactional leadership) and organizational learning. It was influenced by organizational culture characterized by concern for the welfare of the employees. This type of culture encourages the employees to come out with ideas and opinions, to adhere to the rules and regulations of the organizations and to work for the benefit of the organization by putting their maximum effort and even taking risks. There was also the influence of business strategy that is characterized by both analytic and proactive approach, on this relationship between leadership and organizational learning.

The present qualitative study was conducted to augment the results of quantitative studies reported in Chapter 2 and 3 (Study 2A). Moreover, the interviews were conducted on the top management of the organizations from which data were collected for Study 2A (though the sample of Study 2A composed of middle level manager). Therefore, the result of this study would provide the perspectives and opinions of the top management on the concept of organizational learning and its relationship with the various factors. This study was basically designed to explore answers to the following questions (most of them were extensions of the questions in Study 2A) from the top management's point of view –

- 1) Whether there is sharing of knowledge and information amongst the members of the organization?
- 2) What are the mechanisms that facilitate such processes?
- 3) Whether these processes have impact on the performance of the organizations in terms of profitability of the organizations?
- 4) What are the role of leaders, organizational culture and strategies in terms facilitating these processes?
- 5) Finally, whether the organizations, through these processes, are able to learn and then create knowledge base which would help the organization in innovation, in the future?

It should be noted here that the researcher had deliberately avoided using the term “organizational learning” but rather used terms like “sharing of knowledge and information” and further probes such as “sharing at the individual level, organizational level and across hierarchy”. Using the term “organizational learning” directly might have provided lead to the respondents and put them in the typical framework of “giving responses that the researcher wants to get”. Rather, it was thought to be more prudent to use terms, which the respondents were familiar with and at the same time carried similar meaning and the essence of “organizational learning”. Such approach of using interview schedule that was prepared using familiar subjects to introduce unfamiliar ones has also been used by Lipshitz and Popper (2000).

Method

Participants

The sample of this study comprised of 30 (Male = 28, Female = 2) top level managers, such as Executive Directors, General Managers, Deputy General Managers, Chief Personnel Officers, etc. who belonged to the 13 different organizations (out of the total 15 organizations) from which the data for Study 2A were collected. They had

an average total work experience of 25.5 years (SD = 5.4) and it ranged from 17 years to 35 years. Most of the participants had the decision making power and there were many people working under them ranging from a minimum of 10 employees directly reporting to them to a maximum of 2400 employees reporting directly as well as indirectly to them. These top executives were also highly qualified individuals, who had reached the present positions after serving at different places and at different capacities. Most of them had high educational qualifications ranging from engineering degrees from premier institutes to PhD degrees and some of them had qualified the Union Public Service Commission examination, which is one of the most competitive and prestigious examinations in India.

Procedures

The interview was conducted on the basis of interview schedule prepared to find answers to the questions raised in the previous section of this study (which were augmentations of those stated in Study 2A). The interview schedule has been reported in Appendix B. This interview schedule comprised of 12 different items. The first two items were general questions related to the background information about the individual participants, such as their qualification, their work experience, the number of people working under them, their role and duties in the organization, etc. The next five items, i.e., from item number 3 to 7 tried to explore whether organizational learning exists in these organizations and also the different mechanisms related to organizational learning. The eighth item was focused on assessing the impact of organizational learning on the performance of the organization, in terms of their profitability. The ninth item was asked to explore the kind of culture which facilitated the organizational learning processes in these organizations while the tenth items tried to delve into the role of leaders. The next item focused on exploring the different kind of strategies which foster organizational learning and the last item aimed to assess the contribution of organizational learning, in terms of, creating knowledge base in the organization which would contribute to innovation and creativity in future.

For conducting the interview, prior permission was obtained from the participants through telephonic conversations and e-mails. Then a specific time was fixed based on their availability and convenience. The interviewer visited them at the appointed time and conducted the interview using audio-tape recorder. The average time taken for each interview was around 25-30 minutes. Since the interviews were conducted at different organizations across three metropolitan cities (Delhi, Bangalore and Kolkata), it took nearly 4 months to complete the 30 interviews. These interviews were conducted during February, 2008 to May, 2008.

After the compilation and organization of all the 30 interviews, the researcher then typed the transcripts of the interviews in word processor, for further analysis.

Data Analysis

The transcripts of all the 30 interviews were prepared and then they were entered in a qualitative data analysis software, known as Weft QDA (version 1.0.1.0), which is a software tool for the analysis of textual data such as interview transcripts, documents and field notes (Fenton, 2006). It is available free under public domain license. This software helps the user to import all the transcripts in the plain text or PDF format as a single “project”, that is, all the transcripts were stored in a single file together with the textual notes of the responses of the interviewees and observations related to the interviews conducted. Then these transcripts were coded into various “categories”, which were basically analytic themes that were described in certain passages in the transcripts. Under each category, many sub-categories were also identified as further probes were carried out to delve deeper, in certain cases, to understand their meanings and implications. The researcher recorded the various passages that belonged to a certain theme or category by “marking” those section of the transcripts. These “marked” or coded texts were retrieved, subsequently, for comparison and review. These coded texts were compared to see what were the similarities and differences among them. This process helped in bringing out the similar as well as different characteristics within a theme or category. Themes and

categories were also compared and contrasted so that interrelated themes could be identified and then they could be merged under a “more descriptive overarching theme” (Lucas & Kline, 2008). Besides this, frequency distributions of some of the commonly occurring themes and sub-themes were computed. This highlighted the frequency of the occurrence of particular themes. Wherever necessary, appropriate verbatim quotes were incorporated to emphasize the themes or the points.

Results and Discussions

It was observed from the analysis that, several themes emerged, which basically helped to answer the questions raised in the interview. The first category was regarding *sharing of information and expertise amongst the members in the organization*. It was found that 25 participants out of 30 replied that this practice of sharing of information and expertise are prevalent in their organization and they are satisfied with it, but they would still like to encourage more of it. While the remaining 5 respondents did not reply very positively, in the sense that, this practice is present in their respective organizations but they are not satisfied with the amount and the rate at which it is happening presently and they desire more of it. This theme basically tried to explore whether there are free flow and exchange of information and knowledge in the organization and also to check whether organizational learning is taking place. The results obtained reveal that, in most of the organizations, such processes are taking place. Further probing on this theme was carried out and it yielded some sub-categories related to whether this *sharing occurred amongst members at the same or across the hierarchical levels or both* and also whether it occurred at the *individual or organizational level or at both levels* in the organizations. Most of the respondents, that is, 26 out of the 30 respondents, stated that when there is sharing of knowledge and experience, it occurs amongst members at the same level as well as across the different hierarchical levels most of the times while the remaining four respondents were of the opinion that such sharing of experience and information amongst the employees of different levels are not a regular feature or are not carried out “substantially”.

With respect to sharing at the individual and organizational level, 22 respondents were of the opinion that the sharing of information and experience occur at both levels but with more emphasis and prevalence at the organizational level. This implied that organizational learning is taking place in these organizations. The example stated by one of the top executives of a transport company, about how the company was able to overcome problems due to certain technical failure, highlights this point, "... it was our own people- the workers, supervisors, technicians, and lower and middle level managers who co-operated and contributed a lot. It was a joint team effort. We formed quality circles and we did a thorough analysis of the various problems, and you know in any quality circle, we had brain storming sessions where everybody contributed whether he is a Grade 1 officer, diploma holder, technician, engineer, etc. All of them contributed and the discussions were held in a very democratic manner". It is clear that each individual contributes in their own capacity and forms a synergy that finally helps the organization to overcome various hurdles and perform better.

While the remaining 8 interviewees stated that individual level sharing is more common as compared to organizational level. In the latter case, for example, one of the heads of a research division of a reputed research laboratory, opined that "there is motivation for sharing but always for individual advancement and not at organizational level" and a General Manager of a large construction company also stated that, "people are working in isolated box; there is no institutionalized system of sharing the information". This implied that learning was taking place in these organizations, but mostly at the individual level.

The next question was regarding the *mechanisms*, which facilitated the process of sharing amongst the organizational members. This basically tried to explore the existence of different organizational learning mechanisms, without explicit use of the terms. The responses of the interviewees showed patterns of *formal mechanisms* and *informal mechanisms*. The *formal mechanisms* used are seminars, workshops, conferences, training programmes of different kinds like induction training which is

given at the time of joining the organization in order to familiarize the new members with the functioning of the organization; refresher course which are provided to update the knowledge of the members, as and when required and also when deemed necessary by the management to upgrade the skills of the employees and such training are provided to all levels of the employees, i.e., the lower, middle or top management level. Meetings of various kinds are also an important feature of the formal mechanisms. These meetings are of various types, such as scheduled or periodic meetings which were a regular feature and held on particular days on weekly or monthly basis while unscheduled ones are called when problems arise which required immediate attention of the organizational heads. Beside these, manuals, instruction and rule books and circulars are also means of communicating information through formal manner. Intranet and ERP solutions like SAP module have also been used as mechanisms for such purposes. The *informal mechanisms* that the interviewees identified, include methods like quality circles, interaction among members in a team, informal networks such as 'supervisors' network' in which employees of these level interact and share information about technological upgradations which are taking place within the organization in various departments or even outside the organizations. Besides these *informal mechanisms*, there are informal meetings like lunch clubs and also "idea club". According to one deputy General Manager (HR) of a heavy machinery manufacturing company, organizational members of any level of hierarchy are welcomed to share their ideas (no matter how absurd they were!) in the "idea club" and then these are submitted to a committee which would screen them and take up the ideas which may be useful from the business point of view. But the same General Manager (HR) also admits that, this mechanism is not very successful due to many reasons and one of them is the mental set up of the people, as they feel "what is the use of doing this exercise". He is of the opinion that this may be due to the prevailing condition in this very organization where the organization is not functioning well and the staff are getting low salary (the pay scale is still of 1992) and morale is quite low.

These results reported above reveal the existence of both the formal and informal mechanisms of organizational learning and it was also evident that these mechanisms are used by the members at different levels in the organizations. It was observed that, in some cases, the top management use more formal mechanisms, like meetings, circulars, etc. to share information and knowledge with their subordinates. The subordinates also use formal mechanisms to address their problems to the top management; while informal mechanisms are used during exchange of information among members of the same level. This may be due to the fact that all the organizations are public sector organizations where hierarchy still exists and in the opinion of one of the top officials of a public sector organization, there is “...strong entrenched culture, so passing of knowledge is ... in very bureaucratic manner, where rules and procedures are made and are passed down from person to person”. However, in the newly established public sectors units, there is gradual change in this respect. The hierarchy is becoming flatter and the communication between the top management and the subordinates are more open and informal. This finds evidence in the opinions given by the Deputy General Manager of a telecom company which is a newly founded public sector unit, “It is just two or three tier organization, so we all work in team” and the Head of Division of a national scientific laboratory mentioned, “...we have participation by all members so that everybody feels that they are in the decision making process...”.

The next question was regarding the ability to foresee problems that might come up during the execution of certain tasks and to find solutions to such problems. This theme was identified as *proactive strategy of the organization*. This is a very important strategy that facilitates organizational learning as it helps the organization to detect the changes in the external environment and adapt accordingly, to remain competitive and successful. It was observed that 26 out of 30 top executives interviewed, were of the opinion that their organizations are proactive in their approach towards handling certain problems. They can envisage about the problems that are likely to come up due to various factors, such as changes taking place in the outside world, tough competition from the competitors, uncertain

markets, new ventures, influx of new technologies at a fast rate, etc. These organizations also face problems while trying to adapt the technologies imported from outside to the local conditions. These top management people also try to find probable solutions for the problems through meetings, discussions, utilizing the lessons learned from previous experiences, etc. While only one of the interviewees stated that the nature of their work did not necessitate them to adopt this approach, the answers of the remaining 3 respondents are not clear and therefore, it was difficult to draw the meaning. The response of one the interviewees highlights the importance to be proactive in the business world, “The proactive approach is very essential. It is a management practice and one who practices it is a good manager”, as it helps him to “...be prepared and think of what can be the remedial action you are going to take...”.

The purpose of the next question, i.e., whether there were *different units that handled the various stages of information processing* namely, collecting, analyzing, drawing lessons learned, disseminating and putting them to use, was to obtain additional concrete evidence for the existence and use of organizational learning mechanisms. It was observed that 12 interviewees replied that there are no separate, demarcated divisions for handling the various stages and “everyone is part and parcel of the whole process”. Further attempt was made to explore the processes through which it was carried out. It was found that, if any organizational member needed information, for example, in certain projects which require inputs from various areas, the project members would request the relevant people who have the information; consequently, they are provided this information which is shared amongst the project members and various members contribute to the analysis and discussion. Finally, decision is taken and disseminated to the relevant people who need it. This was a regular feature and part of the system of the organization.

16 respondents out of 30 stated that there are separate units that handled the various stages of information processing. These units operated in a vertical as well as horizontal manner. Regarding this, it was observed that data collection are mainly

handled by the lower level staff, which function at the grass root level, and these data are analyzed by the middle level officers who prepare the summary of the analyses, along with their recommendations and possible scope for improvement. These are submitted to the top management level. Then the results are further discussed and analyzed among the top level management. Finally, decisions are taken and disseminated to the relevant people, or as and when this information is required. So “analysis and decision making was horizontal in nature” as these are carried out by top management people at the similar hierarchical level while at the stage of collection and organization of data it is vertical. Another observation was that the divisions were also categorized on the basis of the functions and not only according to the stages of information processing. For example, a person working in the personnel department who handles the promotion of staff has access to the repository of information related to performance of staff and when the time comes for giving promotion to the employees, they work on the available data and analyze it and prepare the report to be submitted to the higher authority, who finally gives the promotion to the deserving person based on the report. Similarly, there are divisions which handle the recruitment, marketing, etc., and they carry out the necessary duties of data collection, analysis, and dissemination of results, etc in their respective functional units.

The seventh question was an extension of the question raised in item number four. It was an attempt to further explore the various *steps*, which the organizations have taken up to ensure that organizational learning is taking place in their organizations. It was found that similar mechanisms stated by the respondents as formal and informal mechanisms were identified again, such as, training, seminars, meetings, periodicals, guideline books, newsletters, bulletins, etc. Moreover, a main emphasis has been given to the use of intranet and internet in disseminating information to the organizational members and also as a means of maintaining communications with them. According to the opinion of the top executives, as organizations are expanding, it is not quite feasible to meet the members, in person, every time to discuss issues which require immediate attention. Therefore, one of the

best alternatives is to communicate through facilities available through intranet and internet, such as e-mails, video conferencing, etc. In the opinion of the General Manager (HR) of a transport company, it was observed that “...with the proper use of internet and intranet facilities, the dissemination of information and ideas can be achieved more effectively”.

One of the most important organizational learning mechanisms is *documentation and retrieval of information* as it helps in maintaining the repertoire of knowledge, which could be used by the present members as well as by the future members. It was found that most of the interviewees are aware of the importance of documentation and they have adopted various ways of maintaining it, such as in the form of manuals, database, circulars, booklets, annual reports, etc. Moreover, these forms of documents and information could easily be retrieved and used when required by the employees. However, some of them admitted that these practices were not upto the mark in their organization and they were presently working on it. A particular case stated by a General Manager (HR) highlights the importance of this process, “There is a need for more elaborate documentation, and that job has not been done on a very regular manner. Things are available, certain planning, designs, etc., in CDs and floppies, but nobody knows what is available with whom because people come and then get transferred or once their deputation period is over, they go back to their parent organization, such things are happening. The cadre here is not permanent; we are also here on deputation for 3 or 4 years but one day, we will leave the organization. So, proper documentation and systematic record keeping where one person should be the custodian of all these things are required. Now people, in the organization are aware of it and this need has been appreciated. And we are gradually fixing up a central control or one nodal person who can maintain all these information and co-ordinate the information whenever a person moves out of this organization.”

The eighth item of the interview schedule was intended to find out whether organizational learning had any *impact on the performance* of the organization, in

terms of better performance which resulted in profits. It could be inferred from the responses that 28 respondents believed that, it indeed, results in better performance and consequently profitability of the organizations, as are evident from the rise in their market share, increased turnover, etc. They are also of the opinion that it has helped the organization to sustain and remain successful in the market even in the present turbulent environment. However, some of them were of the opinion that they have instituted certain organizational learning mechanisms only in the last few years, so it was too early to attribute the profits achieved by the organization to these processes, while another interviewee stated that, though they are aware that such processes results in profitability but these processes are presently not happening to the extent it is required in their organization. One of the most important reasons is that they are still getting the pay-scale of 1990s in his organization and so morale is low and there is less focus on such processes.

The next question focused on the *practices and norms* prevalent in the organization that facilitated the transfer as well as sharing of information in their organization. It was found from the responses of the interviewees, that in all these organizations, there are certain common characteristics of the practices and norms, which affected the process of sharing of knowledge and experience among the members. These includes (1) open and free atmosphere where employees of any level of hierarchy are welcomed to discuss any problem with each other or with their seniors and each one contributes, according to their capacity, to find solutions to the problems. There is also less rigidity and the staff feel comfortable to come out with their ideas and views which contributed to better and effective functioning; (2) presence of free flow of information from top down to bottom up. This helps the bosses as well as the subordinates to take necessary actions or work in a faster manner to meet the targets and there are no unnecessary delays in executing the tasks due to inaccessibility to data and information; (3) there is also willingness of the members to help each other and this played one of the vital roles in facilitating the sharing of knowledge and experience; (4) accessibility of the leaders to the organizational members is an important aspect, in the opinion of the interviewees,

that help to generate, amongst the members, a sense of belongingness to the organization. Such leaders are democratic, more involved, and they have more tendency to delegate sufficient power to the other members to take certain decisions when required, in order to carry out the tasks efficiently; however such members are held accountable for their acts and decisions; (5) an important aspect of the culture prevalent in the organizations is the trust among the members as well as between the members and the management. This trust, according to the top executives, is difficult to build as people have different ego issues, have various backgrounds and have different individual personalities, yet, once it is inculcated, it helps to instill a feeling of ownership among the members and so each member contributes in their own possible way to the achievement of goals of the organization as they have a sense of personal achievement in it; (6) the encouragement and reward in the form of incentives, monetary rewards, felicitation during public functions and programmes, etc. are also given by the top management to the members who perform well and contribute to the overall functioning of the organization; and (7) transparency regarding the functions carried out by organizational members at different levels is another important feature. However, the statement of one of the top officials of a Government organization, functioning very successfully, differs from the views stated above. He was of the opinion that despite the presence of a strong entrenched culture in which knowledge is passed in a bureaucratic manner and where the culture is “not that much open ... it is the structured system which exists for capturing information from the lowest level to the higher level that is helping us”. In this case, the top official gives due importance to the structure of the organization that helps to facilitate the process of sharing of knowledge and information. This signifies the importance of structure in effective functioning of organizational learning. It is also the opinion of many of the interviewees that, leaders play vital role in inculcating a free and open organizational culture which allows free flow and sharing of information. Similar observation was also noted by Schein (1992) who found that leaders have a significant influence in creating and maintaining organizational culture.

The *role of the leaders* was explored in the next question and it was observed from the answers given by the respondents that leaders play very crucial role in facilitating the learning process in the organization. The interviewees were of the opinion that leaders execute their duties by adopting various styles. On the one hand, they use the transformational leadership style such as, encouraging and motivating the subordinates to work for the growth of the organization, building trust and relationship with the organizational members, leading the people by setting examples, showing concern about the welfare of the employees by ensuring that the employees get their timely promotion and other benefits, creating a congenial and open environment where the employees feel comfortable to come up with their ideas or problems and discuss them openly with him. The leader also has a flair for understanding the mindset of the people and takes suitable actions to address their individual needs, shows involvement with the functions carried out by the employees, and was accessible to all the employees, even those at the grass root level. On the other hand, in the opinion of the interviewees, these leaders adopted transactional leadership style, when required, by giving emphasis on setting the required targets and rewarding the employees who meet the set target and also by reprimanding and taking disciplinary actions against those who indulge in wrong doings in the organization, but these are handled tenaciously and carefully. Therefore, it is a combination of both transactional and transformational leadership which facilitates the process of learning and sharing in the organization. It was evident from the statement of one of the General Managers (Marketing) of a telecom company, “Transactional is important, but we also need to migrate from transactional to transformational. A mixture of both is required”. However, it was observed that there was more use and preference for transformational leadership style.

The next question attempted to explore the various *strategies* used by the organization to foster learning in the organization. It has been observed that most of the interviewees stated similar steps, which are used to facilitate the process of learning and sharing of experience and expertise. Training programmes and workshops are some of the most important steps that the respondents have

identified, because these basically, in their opinion, help the organizational members to get the exposure to the “latest trends” in their respective areas and to upgrade their knowledge. It is also a means to “import knowledge” from the external sources. Moreover, sometimes employees are sent to foreign organization, for short durations, and it gives them the opportunity to benchmark their performance as compared to the foreign organizations. During these short visits, the employees also get the chance to learn about the practices prevalent in other foreign organizations. Such exercises have really contributed in gaining more information and knowledge and consequently better performance of the members. Encouragement and reward are also found to be effective in motivating the individuals to learn. The top boss plays an important role in this case, because he has to give the encouragement to the employees to acquire knowledge and skills that will help them to upgrade their status and, in return, contribute to the achievement of the organizational goals. The boss has to provide clear and unambiguous policies and plans which the subordinates could adopt as guidelines for working towards the achievement of the targets set by the organization and also to face the competition from the other competitors in the market. It was also observed, from the answers of the respondents that, maintaining an open atmosphere, where people could either vent out their grievances and problems or share their ideas and views comfortably, is also an important step to foster an atmosphere of exchange of information and knowledge. However, it was interesting to note that, amongst the 13 organizations that were interviewed for the present study, one of them which was functioning very successfully had a peculiar characteristic in regard to the strategy adopted for organizational learning. This is expressed in the opinion of one of the Executive Directors of this very organization, “Learning has become a part of our system, so we don’t have to adopt any strategy as such. Initially, in the formative period, strategy may have been adopted to put the system in place, but now the system is in place.” This implied that learning has been institutionalized in the organization and has become a part and parcel of the functioning of the organization.

The last question, that is, whether the respective organizations were learning and creating knowledge base that would help innovation and creativity in future. This question was especially used as a probe to corroborate the consistency of the answers to the earlier questions, which tried to explore whether organizational learning exists in the respective organizations. It was found that 26 interviewees out of 30 replied in affirmative while only four of them were of the opinion that, though their organizations are working in that direction, however, they still have to “improve a lot in this area as compared to what is happening in other companies”.

Conclusions

The purpose of this study was to have a deeper understanding of the concept of organizational learning and the various mechanisms involved in carrying out this process. It also attempted to explore the role of various contextual factors such as leadership, organizational culture and organizational strategy. Various themes emerged after the content analysis of the responses to the different questions asked during the interviews. The following general conclusions could be drawn from these themes that are important for organizational learning -

1) *Organizational learning and its mechanisms*: It was observed that the themes, which emerged from the responses of the interviewees to the questions (3-7), such as *sharing of information and expertise amongst the members in the organization, sharing at individual or organizational level or at both levels, formal and informal mechanisms, different units that handled the various stages of information processing*, could be merged under an overarching theme of “*existence of organizational learning and its mechanisms*”. This implied the organizational learning is taking place in these organizations and they adopted various formal (structured) and informal (unstructured) mechanisms to facilitate this process. The formal mechanisms included training, seminars, meetings, periodicals, guideline books, newsletters, and bulletins. Emphasis was laid on the use of intranet and internet in disseminating information to the organizational members and also as a means of maintaining communications with them. While informal

mechanisms comprised of quality circles, interaction among members in a team, informal networks such as 'supervisors' network', "idea club", etc. It could therefore, be concluded that organizational learning is not a single process which is performed in a uniform manner in the organization, rather it comprises of different processes performed by different units in the organization in different capacities. Such observations were also found in the case study conducted by Lipshitz and Popper (2000) in two different wards in a university hospital. It was also found that in the public sector organizations, more formal mechanisms were used to share the knowledge and information between the top management and the subordinates, while informal mechanisms were used during exchange of information among members of the same level. However, there are enough indications about the changes that are taking place in organizations. For example, in a newly set up public sector telecom unit (established in September, 2000), it was observed that the hierarchy is becoming flatter and the communication between the top management and the subordinates are more open and informal.

2) *Organizational learning and repertoire of organizational knowledge*: It was also found that an important aspect of organizational learning, that is, *documentation and retrieval of information* is given due emphasis in many of the organizations. This helps the organization in maintaining the repertoire of knowledge which is used by the present members as well as by the future members. Moreover, the responses to the last question, where most of the respondents replied in affirmative that their organizations are learning and creating knowledge base further substantiated that most of these organizations are aware of the contribution of organizational learning in creating a corpus knowledge, which will help them to enrich their core competence, sustain in the market and become more competitive (DeGues, 1998). This repertoire of organizational knowledge is also referred to as "organizational memory" (Huber, 1991) and it is important to the idea of organizational learning. It is also perceived to be important for managers (Yates, 1990) as it helps the managers to deal with the loss of knowledge and technical know-how when organizational members leave the organization.

3) *Organizational learning and the contextual factors*: The results of this study showed that leadership, comprising both transformational and transactional style, emerged as an important factor which influenced the learning and sharing of information and expertise that occurred in the organizations. This further supported the contingency leadership style proposed by Vera and Crossan (2004) which emphasized the importance of the interplay of these two leadership styles in facilitating organizational learning. It also played significant role in creating and maintaining the culture of an organization (Schein, 1992).

It was also observed from the responses of the interviewees that organizational culture present in their organizations comprised of characteristics such as transparency, accountability, trust, openness, accessibility of the leaders, etc. that are similar to the components of learning culture (Lucas & Kline, 2008; Popper & Lipshitz, 1998). Learning culture is a set of shared values that constitute an organizational culture conducive to productive learning (Lipshitz et al., 2002). The importance of such culture in facilitating organizational learning also has been emphasized by several authors who noted that effective organizational learning requires a climate or culture that fosters openness and trust (Argyris & Schon, 1978; Beer & Spector, 1993; Davies & Easterby-Smith, 1984).

The role of strategy was also evident in this study. It was observed that proactive strategy helped the organization to cope with the continuous changes in the external environment. Similarly, Watkins and Marsick (1996) have also emphasized the importance of proactive approach in establishing learning organization.

The above findings further augmented the important roles of the leader, organizational culture and strategy in facilitating organizational learning as was observed in the quantitative study (Study 2A), reported in the earlier section of this chapter.

4) *Organizational learning and organizational performance*: One of the most important findings of this study was the impact of organizational learning on the performance of the organization. It was found that most of the respondents attribute the better performance and profitability of the organization to organizational learning. Earlier studies have also reported similar findings (Bontis et al., 2002; Ellinger et al., 2002; Goh & Richards, 1997). The respondents are also of the opinion that it helps the organization to sustain and function successfully. This is in line with the observation of various scholars who have stated the organizational learning is quickly becoming the only “sustainable competitive advantage” (DeGues, 1998; Stata, 1989). The response of one the top level officers of a Government organization also highlights this point –

“...it has helped in both ways. Firstly, in sustaining the organization and the system for such a long period, whereas we have seen that railway system in the whole world have degenerated or privatized and are not very much relevant. However, in India, railways in still very relevant and have transformed and have become vibrant. And these systems and mechanisms have greatly helped us in making it relevant even in the changing environment”.

From the above observations and conclusions, it is clear that organizational learning is a multi-faceted process performed by different units in the organization in different capacities (Lipshitz et al., 2002). It is the interplay of transactional and transformational leadership style that works favourably in a culture characterized by trust, openness, accountability, transparency, etc. in facilitating organizational learning. It also played fundamental role in the performance of the organization. The findings of this qualitative study have provided further support for the results of Study 2A, which was the quantitative study conducted on the line of the questions taken up in this study. Moreover, this study has provided the perspectives of the top executives on the concept of organizational learning.

Besides the above mentioned findings, there are few unique points which need to be highlighted. The first point is regarding how knowledge is captured and

managed in the organization. This provides the evidence and case for the importance of harnessing the knowledge present in the organization from the experienced organizational members before they leave the organization and this also shows how knowledge is managed and maintained in the organization. In one of the organizations, which is an aircraft manufacturing company, the General Manager (HR) describes in detail the various steps that they have undertaken to ensure this process functions successfully in their organization. This company started this process in October, 2005. At the outset, the management identified the HR executives as the facilitators of this process and then their first target was to focus on capturing the knowledge of employees who were about to retire in the next few months. This was carried out by personally interviewing the employees which belonged to that category and also asking them to address and give lectures to the other employees in their respective areas whenever required and in the training centers, so that their knowledge is shared with the remaining members. Such interviews and lectures were recorded with the help of audio-visual equipments. If the presentations and lectures required power point presentations and if, such members were not efficient in it, then the HR executives helped them in preparation of the slides as well as to translate the lectures in local languages. Later, this captured information and knowledge was put up to the local committees of the management, formed especially for this purpose, and comprise of senior level managers. They would scrutinize the information and then the relevant and useful information that result from it would be organized in terms of their area of specialization or according to the relevant division in which the information would fit in. They also intend to bring out a knowledge book which contains all such important and relevant information that have been practiced and have proved useful for the organization. This will be made available to all members, from the workman to the executives. In the opinion of the General Manager (HR) this process helps to “arrest knowledge erosion” that is taking place due to the movement of the employees from one organization to another.

Another point which is worth mentioning is how an entrenched culture worked against the interest and growth of the company. This phenomenon was

observed in one of the oldest heavy tools manufacturing company. This company was an old public sector company which had a glorious past and had the monopoly in the market in 1950s. However, it was neither able to keep pace with the changes in the market scenario due to globalization, nor change their monopolistic attitude, and therefore was running into losses. Moreover, the philosophy of the company was to build machines which will last a lifetime. But the present competition required them to change this philosophy. However, due to the entrenched culture prevalent in the organization, this was not possible. In the words of the GM (HR), “Our corporate philosophy has been to build a machine which will last a lifetime. But today’s corporate philosophy is to scrap the machine in 10 years (*that means machines should have shorter lifespan*), so that you can have the business again. So we are not in a position to maintain that kind of tempo with the present market. If we tell our workers that this is the requirement, they will rebel against us – ‘Sir, how can you ask me to reduce the quality?’ They will rebel because it is fixed in their mind that you must build machine which will last for 30-45 years...now our merit itself is becoming our demerit.”

While this qualitative study substantiated the findings of Study 2A and also provided some useful insights regarding the processes of organizational learning, there are some limitations of this study. One of them is the use of individual interview data to infer organizational level phenomena. Another limitation is generalization of findings from few cases (Lipshitz & Popper, 2000). But, the latter problem is resolved by the fact that this study has basically tried to substantiate the findings of the quantitative study and both studies were conducted on same conceptual line and addressing similar unanswered questions that resulted from the review of literature on organizational learning. This solution to the problem of generalization is referred to as “case-to-case translation” by Firestone (1993) whose basic tenet is that “the findings of Study A can be applied directly to Study B if the two cases are sufficiently similar in terms of significant features”. Yet another limitation is that other contextual factors that affect organizational learning, especially, organizational structure has not been explored in this study. However, the

importance of this factor has been highlighted in the observation of one of the top officials of a Government organization. This also has been pointed out in earlier research (Fiol & Lyles, 1985). Therefore, it provides further direction for research in the field of organizational learning to explore the role of organizational structure and its impact on organizational learning across organization.



**Table 3.1: Distribution of Sample (N=286)
Sample 1 (Set 1 Questionnaire)
(Ownership wise)**

Ownership		N	
Public	Organization 1	22	
	Organization 2	13	
	Organization 3	30	
	Organization 4	18	
	Organization 5	14	
	Organization 6	14	
	Organization 8	17	
	Organization 9	17	
	Organization 11	27	
	Organization 12	27	
	Organization 13	25	
	Organization 14	13	
	Organization 15	20	
		(13 Organizations)	257
	Private	Organization 7	13
Organization 10		16	
		(2 Organizations)	29
Total	15 Organizations	286	

**Table 3.2: Intercorrelation and Psychometric Properties of MLQ Dimensions
(N=286)**

Dimensions	1	2	3	4	5	6	7	8	9
1. Idealized Influence (Attributed)	(.72)								
2. Idealized Influence (Behaviour)	.70**	(.68)							
3. Inspirational Motivation	.69**	.69**	(.76)						
4. Intellectual Stimulation	.65**	.66**	.62**	(.61)					
5. Individualized Consideration	.67**	.61**	.49**	.61**	(.60)				
6. Contingent Reward	.73**	.70**	.72**	.69**	.60**	(.71)			
7. Management-by-Exception (Active)	.28**	.43**	.32**	.32**	.35**	.37**	(.69)		
8. Management-by-Exception (Passive)	-.37**	-.28**	-.26**	-.21**	-.11	-.28**	-.01	(.58)	
9. Laissez-faire	-.55**	-.36**	-.42**	-.36**	-.27**	-.50**	-.08	.73**	(.84)
Mean	3.71	3.67	3.81	3.57	3.39	3.68	3.51	2.48	2.16
SD	0.82	0.75	0.77	0.71	0.79	0.76	0.79	0.83	1.07

** = $p < .01$

Figures in parenthesis include coefficient of alpha.

Table 3.3: Factor loadings obtained for Organizational Learning measure (N = 286)

Item No.	Item	Factors*							
		1	2	3	4	5	6	7	8
2	There is a computerized filing system within the organization.	.44	.00	.03	.36	.48	.11	.03	-.27
6	Every new/arriving manager is allotted a scheduled time to learn about his/her functions from the departing manager.	.54	.10	-.00	.24	.40	.09	.13	.12
7	There are follow-up procedures upon completion of tasks.	.43	.08	.31	.17	.41	.03	.06	.20
8	Think tanks are utilized in various areas.	.53	.06	.24	-.01	.35	.31	.13	-.03
9	Information is continually provided concerning the various tasks within the organization.	.40	.16	.41	.19	.25	.36	-.02	.14
10	The organization initiates meetings among its employees after working hours.	.68	.17	.08	.16	.05	-.01	.11	.03
11	A report is written upon completion of each task.	.64	.27	.16	.14	.09	.12	.11	.14
12	Every employee knows that he/she has the responsibility to gather relevant information from outside the organization.	.52	.17	.31	.05	.13	.31	.20	.05
15	Trainers are assigned to instruct new employees.	.43	.24	-.06	.07	.17	.22	-.04	.51
17	There are on-going investigative procedures for analyzing successes.	.53	.06	.23	.37	.23	.23	.09	.21
24	Individuals/teams are able to receive performance evaluation reports immediately from the boss.	.45	.05	.45	.37	.11	.06	.15	-.00
30	The organization nurtures and uses knowledgeable	.41	.28	.36	.15	.05	.36	.05	-.01

Item No.	Item	Factors*							
		1	2	3	4	5	6	7	8
	employees as authorities in certain managerial and professional fields ('Champions').								
32	There is a procedure for rotation of roles/occupations.	.27	.62	.22	-.02	.20	.08	-.07	.18
33	There are updating and coordinating meetings among various teams.	.15	.56	.56	.04	.16	.08	-.02	.09
35	Individual training programs are standard practice in our organization.	.15	.41	.40	.24	.00	.15	.06	.31
36	Group training programs are standard practice (courses, seminars, lectures).	.18	.62	.24	.24	.11	.10	.12	.26
37	External consultants are invited for giving consultancy in certain areas where the organization lacks expertise.	.03	.66	-.05	.02	.24	.14	.25	.03
38	Employees are sent to external professional development programs.	.09	.74	.19	.19	-.01	.02	.19	.10
40	The performance of other organizations is used as a benchmark for evaluation and learning.	.27	.46	.24	.38	.19	.23	.11	-.16
41	Funds are set aside for the professional development of individual employees.	.13	.60	.11	.39	-.01	.12	.13	.18
21	Business or professional plans are modified according to on-going feedback.	.27	.09	.45	.14	.23	.36	.10	.30
23	Departments in our organization have formalized relationships similar to the supplier–customer relationship.	.09	.15	.66	.14	.25	.09	.03	.01
24	Individuals/teams are able to receive performance evaluation reports immediately from the boss.	.45	.05	.45	.37	.11	.06	.15	-.00

Item No.	Item	Factors*							
		1	2	3	4	5	6	7	8
25	Analysis of failures and successes is followed by modification of procedures, instructions and work methods.	.29	.24	.51	.34	.12	.13	.15	.11
26	The reward system encourages participation. For instance, bonuses are given for successful teamwork.	.06	.10	.44	.17	.17	.37	.24	-.01
31	There are regular team/department meetings for the purpose of ongoing reports and discussions.	.21	.32	.55	.02	.23	.14	.01	.02
34	Supply of information and professional support among the various departments are integral parts of our organization.	.00	.28	.46	.32	.26	.19	.14	.30
16	There are archives where data, procedures, performance reports and the like are on file and may be retrieved at any time.	.27	.08	-.03	.53	.35	.32	-.21	.18
42	Information is indexed by categories for easy retrieval.	.20	.29	.28	.63	.19	.16	.01	.05
43	There are professional linkages with other organizations.	.19	.20	.09	.58	.18	.08	.379	.25
45	Team meetings regularly include reports detailing advances in the relevant professional and business information.	.26	.31	.28	.51	.14	.15	.23	.07
46	There is a simple way to retrieve information on any relevant subject.	.18	.31	.24	.62	.21	.18	.04	.16
1	Each project/assignment taken up in our organization has up-to-date directions and follow-up procedures on file.	.14	.22	.22	.15	.68	.19	.02	.07
3	There is an efficient system for	.26	.11	.19	.24	.58	.20	.20	-.07

Item No.	Item	Factors*							
		1	2	3	4	5	6	7	8
	gathering and analyzing professional and business information.								
4	Every new employee/manager who joins our organization receives a document summarizing the previous employee's/manager's work	.38	.17	.10	.09	.53	.05	-.01	.07
5	The organization insists on putting procedures in writing.	-.01	.01	.25	.05	.63	-.02	.00	.22
13	In spite of the division of the organization into various units, mobility of employees exists within the organization according to need.	.14	.18	.10	.11	.43	.29	.18	.25
27	Employees share information willingly with one another.	.13	.14	.27	.22	.20	.67	.04	-.01
28	Individuals do not hesitate to ask for assistance when a problem arises.	.09	.17	.05	.08	.09	.75	.14	.21
29	Willingness to help and to share information is used as a criterion for evaluation	.39	.09	.28	.29	-.00	.51	.09	.09
18	The organization is involved in joint ventures/undertakings with other organizations in the areas of development or production.	.17	.14	.08	-.02	.06	.07	.83	-.02
44	The organization is involved in joint ventures/undertakings in business matters.	.09	.14	.06	.16	.02	.10	.81	.04
14	There are on-going investigative procedures for checking causes of mishaps and failures.	.05	.27	.22	.18	.29	.12	.03	.54
	Eigen values	17.80	2.32	1.79	1.45	1.36	1.25	1.23	1.03
	Percentage of Variance	10.35	10.07	9.28	7.98	7.86	6.59	5.06	4.20
	Cumulative Percentage of Variance	10.35	20.43	29.71	37.70	45.57	52.16	57.23	61.43

Item No.	Item	Factors*							
		1	2	3	4	5	6	7	8

* **Factor 1** = Formalized Learning Procedures (FLP), **Factor 2** = Upgradation of Expertise (UE), **Factor 3** = Emphasis on Interaction and Information Dissemination (FIID), **Factor 4** = Storage and Retrieval of Information (SRI), **Factor 5** = Formal Documentation Procedures (FDP), **Factor 6** = Sharing of Information (SI), **Factor 7** = Learning through Joint Ventures (LTV), **Factor 8** = Detection of Errors (DE)



Table 3.4: Intercorrelation and Psychometric Properties of Organizational Learning Dimensions (N=286)

Dimensions	1	2	3	4	5	6	7	8
1. Formalized Learning Procedures	(.89)							
2. Upgradation of Expertise	.65**	(.89)						
3. Emphasis on Interaction and Information Dissemination	.80**	.79**	(.90)					
4. Storage and Retrieval of Information	.74**	.76**	.75**	(.86)				
5. Formal Documentation Procedures	.83**	.56**	.69**	.67**	(.84)			
6. Sharing of Information	.65**	.54**	.67**	.60**	.55**	(.75)		
7. Learning through Joint Ventures	.35**	.35**	.35**	.32**	.29**	.30**	(.75)	
8. Detection of Errors	.61**	.55**	.58**	.53**	.54**	.44**	.18**	(.56)
Mean	5.63	5.98	6.00	5.89	6.08	6.13	6.38	6.23
SD	1.59	1.64	1.57	1.70	1.53	1.70	2.13	1.84

** = $p < .01$

Figures in parenthesis include coefficient of alpha.

Table 3.5: Factor loadings obtained for Organizational Culture measure (N = 286)

Item No.	Item	Factors*				
		1	2	3	4	5
1	People are comfortable in unfamiliar situations; they do not mind taking risks	.72	-.00	.23	.09	.12
2	Everybody always puts in a maximal effort	.79	-.12	.09	-.18	.07
8	The norms of our organization cover people's behavior, both on the job and at home	.41	-.03	.49	.02	-.15
51	We always dress informally and casually	-.42	.20	.21	.10	.19
21	We try to be pioneers in developing new products and services	.45	-.01	.16	.35	.03
29	Top managers want to hear people's opinions, even if different from theirs.	.52	-.32	-.19	-.05	.02
22	Competition and mistrust between departments are frequent	-.23	.43	-.07	.20	.08
3	Each day is pretty much the same	-.06	.67	-.07	.04	.02
10	Our organization and people are closed and secretive, even among insiders	-.38	.42	-.11	.22	.33
15	The major emphasis is on correctly following organizational procedures	-.10	.73	.14	-.06	-.03
60	Typical member is sloppy	.00	.65	-.24	.10	.04
11	New employees usually need only a few days to feel at home	.16	-.30	.42	-.00	.03
53	Management is generous with small things that make the employees' lives more pleasant	.08	-.17	.68	-.04	-.20
4	Personal problems of employees are always taken into account; getting the job done comes second	.10	.05	.67	.06	-.14
47	Decisions are made by the most expert or best informed people, wherever they are placed in the hierarchy	.03	-.02	.66	-.02	.39
17	In matters of business ethics, we are pragmatic, not dogmatic	-.30	.19	-.07	.71	.03
16	Results are more important than following correct procedures	.12	.03	.04	.84	.06
54	Only very special people fit into our organization	.17	-.07	.02	.01	.76
6	Our company/organization is only interested in the work our employees do	-.12	.19	-.27	.10	.60
Eigen values		3.95	1.93	1.46	1.16	1.12

Item No.	Item	Factors*				
		1	2	3	4	5
	Percentage of Variance	12.68	11.39	11.30	8.05	7.33
	Cumulative Percentage of Variance	12.68	24.07	35.38	43.43	50.76

* **Factor 1** = Synergetic Culture, **Factor 2** = Closed Culture, **Factor 3** = Employee Oriented Culture, **Factor 4** = Result Oriented Culture, **Factor 5** = Job Oriented Culture.



Table 3.6: Intercorrelation and Psychometric Properties of Organizational Culture Dimensions (N=286)

Dimensions	1	2	3	4	5
1. Synergetic Culture	(.52)				
2. Closed Culture	-.10	(.65)			
3. Employee Oriented Culture	.54**	-.08	(.63)		
4. Result Oriented Culture	-.02	.28**	-.05	(.55)	
5. Job Oriented Culture	-.03	.15*	-.13*	.167**	(.31)
Mean	2.91	2.68	2.75	2.57	2.75
SD	0.66	0.64	0.76	1.01	0.95

** = $p < .01$; * = $p < .05$

Figures in parenthesis include coefficient of alpha.

Table 3.7: Factor loadings of Job Satisfaction measure (N = 286)

Item No.	Item	Factors*		
		1	2	3
3	The amount of freedom you have on your job.	.62	.37	.18
4	The chances you have to learn new things.	.80	.11	.18
5	The respect you receive from the people you work with.	.41	.69	.09
6	The chances you have to accomplish something worthwhile.	.77	.24	.14
8	The chances you have to do something that makes you feel good about yourself as person.	.73	.28	.04
9	The way you are treated by the people you work with.	.40	.74	.05
10	The chances you have to take part in making decisions.	.73	.27	.05
2	The friendliness of the people you work with.	.28	.70	.21
11	The amount of job security you have.	.09	.75	.07
1	The fringe benefits you receive.	.06	.27	.84
7	The amount of pay you get.	.22	.00	.86
Eigen values		5.05	1.28	1.03
Percentage of Variance		29.14	23.06	14.88
Cumulative Percentage of Variance		29.14	52.20	67.09

* **Factor 1** = Intrinsic Satisfaction, **Factor 2** = Social Satisfaction, **Factor 3** = Extrinsic Satisfaction

Table 3.8: Intercorrelation and Psychometric Properties of Job Satisfaction Dimensions (N=286)

Dimensions	1	2	3
1. Intrinsic Satisfaction	(.88)		
2. Social Satisfaction	.78**	(.80)	
3. Extrinsic Satisfaction	.36**	.33**	(.72)
Mean	5.21	5.61	4.50
SD	1.06	1.04	1.54

** = $p < .01$;

Figures in parenthesis include coefficient of alpha.

Table 3.9: Intercorrelation and Psychometric Properties of Business Strategy Dimensions (N=29)

Dimensions	1	2	3
1. Analyzer	(.86)		
2. Defender	.72**	(.67)	
3. Prospector	.40*	.59**	(.76)
Mean	5.25	4.75	4.52
SD	1.14	1.37	0.76

** = $p < .01$; * = $p < .05$

Figures in parenthesis include coefficient of alpha.

TABLE 3.10: ANOVA SUMMARY A X B (Repeated)

Design: [Organizations: 15 Organizations X 9 Dimensions of Leadership: Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership]

Dependant Measure: Scores on Dimensions of Leadership

Source	SS	df	MS	F	Significance
TOTAL	2077.87	2573			
Between-Subjects	53.52	285			
A (Organizations)	6.46	14	.46	2.66	.00
Error (Between)	47.06	271	.17		
Within-Subjects	2024.35	2288			
B (Leadership)	800.31	8	100.03	206.88	.00
AB	176.72	112	1.57	3.26	.00
Error (Within)	1048.32	2168	.48		

TABLE 3.11: ANOVA SUMMARY A X B (Repeated)

Design: (Organizations: **15 Organizations X 8** Dimensions of Organizational Learning: Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures, Detection of Errors)

Dependant Measure: Scores on Dimensions of Organizational Learning

Source	SS	df	MS	F	Significance
TOTAL	3356.68	2287			
Between-Subjects	497.48	285			
A (Organizations)	71.18	14	5.08	3.23	.00
Error (Between)	426.30	271	1.57		
Within-Subjects	2859.20	2002			
B (Organizational Learning)	77.47	7	11.06	9.90	.00
AB	661.89	98	6.75	6.04	.00
Error (Within)	2119.84	1897	1.11		

TABLE 3.12: ANOVA SUMMARY A X B (Repeated)
Design: [Organizations: 15 Organizations X 5 Dimensions of Organizational Culture: Synergetic, Closed, Employee Oriented, Result Oriented, Job Oriented]
Dependant Measure: Scores on Dimensions of Organizational Culture

Source	SS	df	MS	F	Significance
TOTAL	778.70	1439			
Between-Subjects	48.08	285			
A (Organizations)	1.81	14	.13	.75	.71
Error (Between)	46.27	271	.17		
Within-Subjects	730.62	1144			
B (Organizational Culture)	18.27	4	4.56	7.72	.00
AB	71.10	56	1.27	2.14	.00
Error (Within)	641.25	1084	.59		

TABLE 3.13: ANOVA SUMMARY A X B (Repeated)
Design: [Organizations: 15 Organizations X 3 Dimensions of Job Satisfaction:
 Intrinsic, Social, Extrinsic]
Dependant Measure: Scores on Dimensions of Job Satisfaction

Source	SS	df	MS	F	Significance
TOTAL	902.63	857			
Between-Subjects	272.05	285			
A (Organizations)	46.98	14	3.35	4.04	.00
Error (Between)	225.07	271	.83		
Within-Subjects	630.58	572			
B (Job Satisfaction)	137.93	2	68.96	101.32	.00
AB	123.75	28	4.42	6.49	.00
Error (Within)	368.90	542	.68		

TABLE 3.14: ANOVA SUMMARY A X B (Repeated)
Design: [Organizations: 13 Organizations X 3 Dimensions of Business Strategy:
 Analyzer, Defender & Prospector]
Dependant Measure: Scores on Dimensions of Business Strategy

Source	SS	df	MS	F	Significance
TOTAL	61.59	86			
Between-Subjects	24.73	28			
A (Organizations)	12.01	12	1.00	1.25	.32
Error (Between)	12.72	16	.79		
Within-Subjects	36.86	58			
B (Business Strategy)	5.64	2	2.82	5.75	.01
AB	15.42	24	.64	1.30	.23
Error (Within)	15.70	32	.49		

Table 3.15: Correlation among Leadership, Organizational Learning and Job Satisfaction (N = 286)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	FIID	SRI	FDP	SI	LJV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.32**	.27**	.27**	.29**	.25**	.33**	.20**	-.02	.39**	.33**	.29**
Idealized influence (Behaviour)	.29**	.24**	.23**	.28**	.21**	.32**	.16**	-.10	.29**	.20**	.27**
Inspirational Motivation	.36**	.31**	.29**	.33**	.23**	.40**	.21**	-.13*	.27**	.21**	.19**
Intellectual Stimulation	.25**	.21**	.22**	.24**	.23**	.29**	.19**	-.06	.39**	.30**	.25**
Individualized Consideration	.36**	.32**	.29**	.32**	.26**	.39**	.19**	-.08	.25**	.15**	.21**
Contingent Reward	.27**	.26**	.21**	.27**	.14*	.28**	.18**	-.06	.32**	.27**	.24**
Management-by-exception (Active)	.09	.13*	.08	.06	.01	.11	.08	.02	.12*	.08	.16**
Management-by-exception (Passive)	.27**	.29**	.26**	.24**	.19**	.30**	.10	-.08	-.20**	-.31**	-.06
Laissez-faire leadership	-.12*	-.17**	-.25**	-.12*	-.15**	-.17**	-.08	-.13*	-.30**	-.36**	-.18**

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (FIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LTV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Table 3.16: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)
(N=286)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.33	.11	35.49 <i>df</i> (1,284)	.00	.33	.00	Contingent Reward
2.	.35	.12	19.97 <i>df</i> (2,283)	.00	.21 .16	.01 .04	Contingent Reward, Idealized Influence (Attributed)
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.31	.10	32.12 <i>df</i> (1,284)	.00	.31	.00	Contingent Reward
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.40	.16	54.37 <i>df</i> (1,284)	.00	.40	.00	Contingent Reward
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.29	.08	26.91 <i>df</i> (1,284)	.00	.29	.00	Contingent Reward

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.39	.15	51.79 <i>df</i> (1,284)	.00	.39	.00	Contingent Reward
2.	.40	.16	28.20 <i>df</i> (2,283)	.00	.27	.00	Contingent Reward,
					.16	.04	Idealized Influence (Attributed)
Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.28	.08	25.17 <i>df</i> (1,284)	.00	.28	.00	Contingent Reward
Dependent variable: Learning through Joint Ventures (LJV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.13	.01	4.95 <i>df</i> (1,284)	.02	.13	.02	Idealized Influence (Behaviour)
Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.30	.09	28.97 <i>df</i> (1,284)	.00	.30	.00	Contingent Reward
2.	.32	.10	16.62 <i>df</i> (2,283)	.00	.19	.00	Contingent Reward,
					.15		Idealized Influence (Behaviour)

Table 3.17: Correlation among Leadership, Organizational Learning and Job Satisfaction for organizations with high score on Synergetic Culture (N = 159)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.39**	.31**	.38**	.24**	.46**	.34**	-.01	.42**	.41**	.28**	.21**
Idealized influence (Behaviour)	.28**	.24**	.29**	.18**	.34**	.27**	.00	.28**	.38**	.26**	.18*
Inspirational Motivation	.34**	.23**	.30**	.22**	.37**	.30**	-.01	.31**	.37**	.30**	.12
Intellectual Stimulation	.37**	.28**	.34**	.24**	.40**	.34**	.04	.36**	.36**	.26**	.22**
Individualized Consideration	.27**	.29**	.26**	.25**	.32**	.18*	-.08	.23**	.29**	.17*	.13
Contingent Reward	.40**	.37**	.44**	.29**	.45**	.35**	-.02	.39**	.34**	.26**	.18*
Management-by-exception (Active)	.19*	.10	.13	.10	.21**	.08	-.07	.21**	-.01	-.03	.06
Management-by-exception (Passive)	-.11	-.13	-.17*	-.07	-.10	-.07	.06	-.17*	-.12	-.15	-.06
Laissez-faire	-.28**	-.26**	-.33**	-.19**	-.27**	-.24**	-.06	-.28**	-.32**	-.24**	-.19**

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with high score on Synergetic Culture (N = 159)

Table 3.18: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership
Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.40	.16	30.86 <i>df(1,157)</i>	.00	.40	.00	Contingent Reward
2.	.43	.18	17.78 <i>df(2,156)</i>	.00	.27 .19	.01 .04	Contingent Reward Intellectual Stimulation
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.37	.13	25.25 <i>df(1,157)</i>	.00	.37	.00	Contingent Reward
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.44	.19	38.07 <i>df(1,157)</i>	.00	.44	.00	Contingent Reward
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.29	.08	14.48 <i>df(1,157)</i>	.00	.29	.00	Contingent Reward

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.46	.21	42.74 <i>df</i> (1,157)	.00	.46	.00	Idealized Influence (Attributed)
2.	.49	.24	24.64 <i>df</i> (2,156)	.00	.26	.01	Idealized Influence (Attributed)
					.25	.02	Contingent Reward
Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.35	.12	22.83 <i>df</i> (1,157)	.00	.35	.00	Contingent Reward
Dependent variable: Learning through Joint Ventures (LJV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	None						
Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.31	.09	17.20 <i>df</i> (1,157)	.00	.31	.00	Contingent Reward

Table 3.19: Correlation among Leadership, Organizational Learning and Job Satisfaction for organizations with low score on Synergetic Culture (N = 96)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	FIID	SRI	FDP	SI	LTV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.08	.14	.21*	.11	.09	.11	.02	.01	.32**	.36**	.30**
Idealized influence (Behaviour)	.12	.10	.19	.07	.18	.19	.09	.11	.04	.08	.30**
Inspirational Motivation	-.00	.05	.10	.04	.07	-.04	.02	-.03	.00	.01	.25**
Intellectual Stimulation	.09	.17	.22*	.11	.10	.11	-.04	.07	.30**	.24*	.32**
Individualized Consideration	.17	.09	.17	.14	.13	.10	-.01	.14	.14	.08	.31**
Contingent Reward	.13	.17	.32**	.16	.22*	.09	.11	.08	.25**	.25**	.35**
Management-by-exception (Active)	.13	.17	.23*	.22*	.13	.22*	.10	.09	.14	-.02	.18
Management-by-exception (Passive)	.13	-.02	-.04	.05	.01	.09	.25**	.02	-.26**	-.42**	.01
Laissez-faire	.12	.03	-.10	.06	.04	.10	.18	-.04	-.23*	-.40*	-.08

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (FIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with low score on Synergetic Culture (N = 96)

Table 3.20: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership
Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	None						

Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	None						

Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	10.86 <i>df(1,94)</i>	.00	.32	.00	Contingent Reward

Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.22	.05	5.01 <i>df(1,94)</i>	.00	.22	.02	Management-by-exception (Active)

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.22	.05	4.91 <i>df(1,94)</i>	.00	.22	.02	Contingent Reward

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.22	.04	4.76 <i>df</i> (1,94)	.00	.22	.03	Management- by-exception (Active)
Dependent variable: Learning through Joint Ventures (LJV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.25	.06	6.44 <i>df</i> (1,94)	.01	.25	.01	Management- by-exception (Passive)
2.	.33	.11	5.96 <i>df</i> (2,93)	.00	.34	.00	Management- by-exception (Passive)
					.24	.02	Contingent Reward
Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	11.16 <i>df</i> (1, 94)	.00	.32	.00	Idealized Influence (Behaviour)

Table 3.21: Correlation among Leadership, Organizational Learning and Job Satisfaction for organizations with high score on Closed Culture (N = 101)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.35**	.32**	.40**	.34**	.36**	.32**	.15	.35**	.41**	.30**	.26**
Idealized influence (Behaviour)	.32**	.38**	.40**	.31**	.39**	.23*	.14	.20*	.36**	.25**	.23*
Inspirational Motivation	.26**	.24**	.27**	.24*	.30**	.20*	.11	.18	.30**	.18	.20*
Intellectual Stimulation	.27**	.35**	.34**	.29**	.33**	.21*	.03	.18	.45**	.34**	.29**
Individualized Consideration	.36**	.39**	.41**	.38**	.36**	.27**	.13	.25**	.30**	.22*	.25**
Contingent Reward	.33**	.31**	.41**	.31**	.45**	.26**	.16	.24*	.32**	.22*	.20*
Management-by-exception (Active)	.31**	.24**	.31**	.36**	.31**	.30**	.13	.21*	.18	.08	.09
Management-by-exception (Passive)	-.07	-.08	-.11	-.08	-.10	-.12	-.00	-.29**	-.20*	-.30**	-.06
Laissez-faire	-.11	-.09	-.14	-.10	-.13	-.15	-.08	-.22*	-.27**	-.32**	-.09

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with high score on Closed Culture (N = 101)

Table 3.22: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.36	.13	14.81 <i>df(1,99)</i>	.00	.36	.00	Individualized Consideration
2.	.42	.17	10.50 <i>df(2,98)</i>	.00	.29	.00	Individualized Consideration
					.22	.02	Management-by-exception
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.39	.15	18.20 <i>df(1,99)</i>	.00	.39	.00	Individualized Consideration
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.41	.17	20.30 <i>df(1,99)</i>	.00	.41	.00	Individualized Consideration
2.	.46	.21	13.18 <i>df(2,98)</i>	.00	.34	.00	Individualized Consideration
					.21	.02	Management-by-exception (Active)

Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.38	.15	17.62 <i>df</i> (1,99)	.00	.38	.00	Individualized Consideration
2.	.46	.21	13.56 <i>df</i> (2,98)	.00	.30	.00	Individualized Consideration
					.26	.00	Management-by-exception (Active)
Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.45	.20	26.22 <i>df</i> (1,99)	.00	.45	.00	Contingent Reward
2.	.49	.24	15.96 <i>df</i> (2,98)	.00	.39	.00	Contingent Reward
					.20	.03	Management-by-exception (Active)
Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	11.41 <i>df</i> (1,99)	.00	.32	.00	Idealized Influence (Attributed)
2.	.40	.16	9.52 <i>df</i> (2,98)	.00	.26	.01	Idealized Influence (Attributed)
					.24	.01	Management-by-exception (Active)
Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.36	.13	15.48 <i>df</i> (1,99)	.00	.36	.00	Contingent Reward

Table 3.23: Correlation among Leadership, Organizational Learning and Job Satisfaction for organizations with low score on Closed Culture (N = 143)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.24**	.28**	.31**	.17*	.33**	.28**	-.03	.26**	.40**	.36**	.22**
Idealized influence (Behaviour)	.14	.12	.15	.09	.21**	.25**	-.02	.19*	.28**	.22**	.14
Inspirational Motivation	.24**	.19*	.25**	.17*	.30**	.22**	-.05	.25**	.27**	.25**	.08
Intellectual Stimulation	.26**	.23**	.29**	.21**	.29**	.33**	-.00	.28**	.38**	.33**	.20**
Individualized Consideration	.16*	.13	.11	.14	.19*	.10	-.15	.13	.19*	.09	.12
Contingent Reward	.27**	.31**	.37**	.25**	.33**	.33**	-.03	.31**	.39**	.37**	.17*
Management-by-exception (Active)	.08	.11	.09	.08	.11	.01	-.06	.15	.06	.08	.06
Management-by-exception (Passive)	.03	-.09	-.16	-.01	-.01	-.02	.09	-.03	-.20**	-.33**	-.04
Laissez-faire	-.08	-.21**	-.31**	-.12	-.13	-.16*	-.02	-.16*	-.39**	-.43**	-.14

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with low score on Closed Culture (N = 143)

Table 3.24: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership
Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.27	.07	11.24 <i>df</i> (1,141)	.00	.27	.00	Contingent Reward

Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.31	.10	15.90 <i>df</i> (1,141)	.00	.31	.00	Contingent Reward

Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.37	.14	23.31 <i>df</i> (1,141)	.00	.37	.00	Contingent Reward

Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.25	.06	9.59 <i>df</i> (1,141)	.00	.25	.00	Contingent Reward

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.33	.11	18.10 <i>df</i> (1,141)	.00	.33	.00	Contingent Reward

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.33	.11	17.52 <i>df</i> (1,141)	.00	.33	.00	Intellectual Stimulation

Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.19	.03	5.75 <i>df</i> (1, 141)	.02	.18	.02	Contingent Reward



Table 3.25: Correlation among Leadership, Organizational Learning and Job Satisfaction for organizations with high score on Employee oriented Culture (N = 57)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.46**	.29*	.47**	.26*	.50**	.45**	-.12	.38**	.40**	.29*	.15
Idealized influence (Behaviour)	.32*	.25	.39**	.17	.30*	.34**	-.13	.22	.50**	.29*	.17
Inspirational Motivation	.39**	.30*	.40**	.21	.34**	.42**	-.11	.25	.41**	.31*	.08
Intellectual Stimulation	.36**	.28*	.41**	.23	.43**	.34**	-.09	.29*	.48**	.32*	.29*
Individualized Consideration	.37**	.44**	.43**	.35**	.35**	.35**	-.12	.22	.36**	.21	.15
Contingent Reward	.45**	.32**	.55**	.34**	.50**	.47**	-.16	.39**	.43**	.29*	.27*
Management-by-exception (Active)	.28*	.04	.26*	.16	.26*	.21	-.23	.25*	-.14	-.18	.15
Management-by-exception (Passive)	-.26*	-.17	-.26*	-.14	-.25*	-.18	-.02	-.29*	-.18	-.18	-.09
Laissez-faire	-.37**	-.31*	-.43**	-.35**	-.31*	-.40**	-.08	-.26*	-.33**	-.25	-.16

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with high score on Employee Oriented Culture (N = 57)

Table 3.26: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership
Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.46	.21	15.37 <i>df(1,55)</i>	.00	.46	.00	Idealized Influence (Attributed)
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.44	.19	13.21 <i>df(1,55)</i>	.00	.44	.00	Idealized Consideration
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.55	.30	23.79 <i>df(1,55)</i>	.00	.55	.00	Contingent Reward
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.35	.12	7.94 <i>df(1,55)</i>	.00	.35	.01	Idealized Consideration

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.50	.25	18.95 <i>df</i> (1,55)	.00	.50	.00	Idealized Influence (Attributed)

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.47	.22	15.56 <i>df</i> (1,55)	.00	.47	.00	Contingent Reward



Table 3.27: Correlation among Leadership, Organizational Learning and Job Satisfaction for organizations with low score on Employee oriented Culture (N = 142)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.16*	.21**	.28**	.16*	.19*	.15	.17*	.18*	.30**	.32**	.35**
Idealized influence (Behaviour)	.21**	.20*	.28**	.17*	.27**	.21**	.22**	.21**	.15	.15	.38**
Inspirational Motivation	.11	.16	.19*	.13	.16*	.06	.12	.11	.09	.12	.30**
Intellectual Stimulation	.15	.17*	.23**	.14	.18*	.18*	.03	.17*	.36**	.30**	.31**
Individualized Consideration	.22**	.16*	.22**	.19*	.19*	.16	.08	.21**	.20**	.15	.31**
Contingent Reward	.21**	.22**	.33**	.22**	.29**	.21**	.21**	.24**	.27**	.28**	.35**
Management-by-exception (Active)	.24**	.24**	.26**	.28**	.25**	.26**	.17*	.18*	.28**	.12	.23**
Management-by-exception (Passive)	.10	-.02	-.03	.03	-.02	.02	.12	-.06	-.22**	-.37**	-.03
Laissez-faire	.06	-.04	-.12	.01	-.03	-.00	-.01	-.12	-.27**	-.40**	-.17*

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with low score on Employee Oriented Culture (N = 142)

Table 3.28: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership
Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.24	.05	8.60 <i>df</i> (1,140)	.00	.24	.00	Management-by-exception (Active)
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.24	.06	9.15 <i>df</i> (1,140)	.00	.24	.00	Management-by-exception (Active)
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.33	.11	17.36 <i>df</i> (1,140)	.00	.33	.00	Contingent Reward
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.28	.08	12.34 <i>df</i> (1,140)	.00	.28	.00	Management-by-exception (Active)
Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.29	.08	13.49 <i>df</i> (1,140)	.00	.29	.00	Contingent Reward

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.26	.07	10.50 <i>df</i> (1,140)	.00	.26	.00	Management- by-exception (Active)

Dependent variable: Learning through Joint Ventures (LJV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.22	.04	7.17 <i>df</i> (1,140)	.01	.22	.01	Idealized Influence (Behaviour)
2.	.29	.08	6.60 <i>df</i> (2,139)	.00	.27 .20	.00 .02	Idealized Influence (Behaviour) Management- by-exception (Passive)

Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	16.10 <i>df</i> (1,140)	.00	.32	.00	Idealized Influence (Behaviour)

Table 3.29: Correlation among Leadership, Organizational Learning and Job Satisfaction for organizations with high score on Result oriented Culture (N = 124)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.33**	.26**	.36**	.23**	.31**	.30**	.15	.32**	.48**	.42**	.27**
Idealized influence (Behaviour)	.30**	.23**	.31**	.20*	.31**	.32**	.19*	.25**	.30**	.24**	.33**
Inspirational Motivation	.27**	.21**	.28**	.20*	.29**	.23**	.09	.24**	.29**	.22**	.26**
Intellectual Stimulation	.27**	.24**	.32**	.21*	.26**	.25**	.08	.25**	.43**	.33**	.35**
Individualized Consideration	.37**	.28**	.34**	.30**	.31**	.29**	.04	.29**	.35**	.19*	.30**
Contingent Reward	.35**	.31**	.43**	.31**	.38**	.28**	.21*	.30**	.39**	.35**	.38**
Management-by-exception (Active)	.17	.13	.22**	.19*	.17	.19*	.01	.06	.15	.08	.21*
Management-by-exception (Passive)	.01	-.08	-.05	-.00	-.03	-.00	.04	-.11	-.29**	-.44**	-.05
Laissez-faire	-.06	-.11	-.16	-.07	-.06	-.07	-.11	-.22**	-.32**	-.41**	-.17

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with high score on Result Oriented Culture (N = 124)

Table 3.30: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership
Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.37	.14	20.43 <i>df(1,122)</i>	.00	.37	.00	Individualized Consideration
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.31	.09	13.38 <i>df(1,122)</i>	.00	.31	.00	Contingent Reward
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.43	.18	28.42 <i>df(1,122)</i>	.00	.43	.00	Contingent Reward
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.31	.09	13.14 <i>df(1,122)</i>	.00	.31	.00	Contingent Reward

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.38	.14	21.13 <i>df</i> (1,122)	.00	.38	.00	Contingent Reward

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	14.50 <i>df</i> (1,122)	.00	.35	.00	Contingent Reward

Dependent variable: Learning through Joint Ventures (LJV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.21	.04	5.92 <i>df</i> (1,122)	.02	.21	.02	Contingent Reward

Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.28	.08	10.59 <i>df</i> (1,122)	.00	.28	.00	Contingent Reward

Table 3.31: Correlation among Leadership, Organizational Learning and Job Satisfaction for organizations with low score on Result oriented Culture (N = 27)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.54**	.57**	.71**	.53**	.55**	.41*	.35	.48**	.41*	.31	.50**
Idealized influence (Behaviour)	.43*	.49**	.63**	.52**	.44*	.32	.38*	.12	.36	.20	.55**
Inspirational Motivation	.72**	.67**	.68**	.56**	.44*	.43*	.40*	.45*	.26	.23	.32
Intellectual Stimulation	.33	.38*	.52**	.51**	.48**	.52**	.10	.15	.76**	.62**	.35
Individualized Consideration	.40*	.37	.52**	.40*	.36	.27	.53**	.25	.34	.32	.43*
Contingent Reward	.32	.26	.41*	.50**	.54**	.40*	.46*	.30	.45*	.46**	.31
Management-by-exception (Active)	.45*	.49**	.45*	.65**	.49**	.59**	.35	.19	.60**	.53**	.29
Management-by-exception (Passive)	.05	.00	-.13	-.06	-.11	-.18	-.02	-.25	-.40*	-.40*	-.20
Laissez-faire	-.11	-.15	-.32	-.28	-.22	-.47**	-.21	-.05	-.59**	-.53**	-.09

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with low score on Result Oriented Culture (N = 27)

Table 3.32: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.72	.52	27.42 <i>df(1,25)</i>	.00	.72	.00	Inspirational Motivation
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.67	.45	20.99 <i>df(1,25)</i>	.00	.67	.00	Inspirational Motivation
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.71	.51	26.39 <i>df(1,25)</i>	.00	.71	.00	Idealized influence (Attributed)
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.65	.42	18.31 <i>df(1,25)</i>	.00	.65	.02	Management-by-exception (Active)
2.	.71	.51	12.53 <i>df(2,24)</i>	.00	.51	.00	Management-by-exception (Active)
					.32	.05	Idealized Influence (Attributed)

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.55	.31	11.21 <i>df</i> (1,25)	.00	.55	.00	Idealized Influence (Attributed)
Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.59	.34	13.34 <i>df</i> (1,25)	.00	.59	.00	Management-by-exception (Active)
Dependent variable: Learning through Joint Ventures (LJV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.53	.28	9.90 <i>df</i> (1,25)	.00	.53	.00	Individualized Consideration
Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.69	.48	23.24 <i>df</i> (1,25)	.00	.69	.00	Idealized Influence (Attributed)
2.	.76	.58	16.56 <i>df</i> (1,25)	.00	.83	.00	Idealized Influence (Attributed)
					.34	.03	Management-by-exception (Passive)
3.	.81	.65	14.67 <i>df</i> (1,25)	.00	.62	.00	Idealized Influence (Attributed)
					.40	.02	Management-by-exception (Passive)
					.36	.03	Idealized Influence (Behaviour)

Table 3.33: Correlation among Leadership, Organizational Learning and Job Satisfaction for organizations with high score on Job Oriented Culture (N = 14)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.46	.49	.69**	.51	.44	.32	.20	.53*	.27	.12	.42
Idealized influence (Behaviour)	.49	.42	.55*	.53*	.53*	.26	.42	.13	.10	-.08	.41
Inspirational Motivation	.70**	.65**	.75**	.68**	.46	.29	.30	.61*	.17	.17	.42
Intellectual Stimulation	.20	.28	.38	.46	.53*	.59*	-.10	.07	.75**	.53*	.11
Individualized Consideration	.33	.23	.40	.30	.22	.25	.49	.321	.06	.05	.28
Contingent Reward	.22	.07	.26	.41	.51	.46	.38	.38	.28	.30	.06
Management-by-exception (Active)	.34	.32	.23	.63*	.34	.67	.21	.047	.50	.43	.00
Management-by-exception (Passive)	.30	.25	.18	.05	-.03	-.20	.03	-.43	-.26	-.33	.14
Laissez-faire	.42	.15	.14	.14	-.09	-.27	.11	-.08	-.51	-.62*	.23

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with high score on Job Oriented Culture (N = 14)

Table 3.34: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.70	.49	11.63 <i>df</i> (1,12)	.01	.70	.01	Inspirational Motivation
2.	.87	.76	18.11 <i>df</i> (2,11)	.00	.77 .52	.00 .00	Inspirational Motivation Laissez-faire

Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.65	.43	9.07 <i>df</i> (1,12)	.01	.65	.01	Inspirational Motivation

Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.75	.56	15.51 <i>df</i> (1,12)	.00	.75	.00	Inspirational Motivation

Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.68	.46	10.33 <i>df</i> (1,12)	.01	.68	.01	Inspirational Motivation

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.53	.28	4.83 <i>df</i> (1,12)	.05	.53	.05	Idealized Influence (Behaviour)

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.67	.44	9.78 <i>df</i> (1,12)	.01	.67	.01	Management-by-exception (Active)

Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.78	.61	19.43 <i>df</i> (1,12)	.00	.78	.00	Inspirational Motivation
2.	.88	.77	18.95 <i>df</i> (2,11)	.00	.84	.00	Inspirational Motivation
					.40	.02	Laissez-faire

Table 3.35: Correlation among Leadership, Organizational Learning and Job Satisfaction for organizations with low score on Job Oriented Culture (N = 152)

Leadership	Organizational Learning#								Job Satisfaction		
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.33**	.25**	.32**	.23**	.38**	.28**	.03	.32**	.35**	.28**	.32**
Idealized influence (Behaviour)	.24**	.20**	.30**	.17*	.31**	.20**	.03	.23**	.38**	.27**	.23**
Inspirational Motivation	.25**	.24**	.27**	.20**	.30**	.28**	.04	.16*	.32**	.23**	.17*
Intellectual Stimulation	.34**	.28**	.32**	.26**	.38**	.26**	.02	.26**	.40**	.32**	.35**
Individualized Consideration	.27**	.29**	.28**	.30**	.28**	.20**	-.01	.20**	.29**	.23**	.23**
Contingent Reward	.41**	.37**	.44**	.35**	.45**	.35**	.05	.34**	.33**	.24**	.30**
Management-by-exception (Active)	.26**	.11	.25**	.17*	.28**	.15	.03	.24**	.06	.03	.15*
Management-by-exception (Passive)	-.09	-.10	-.16*	-.04	-.11	-.05	.00	-.14	-.14	-.22**	-.12
Laissez-faire	-.21**	-.24**	-.30**	-.17*	-.18*	-.26**	-.08	-.22**	-.24**	-.27**	-.26**

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with low score on Job Oriented Culture (N =152)

Table 3.36: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.41	.17	30.66 <i>df</i> (1,150)	.00	.41	.00	Contingent Reward
2.	.44	.19	18.38 <i>df</i> (2,149)	.00	.36 .17	.00 .02	Contingent Reward Management-by-exception (Active)
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.37	.14	.37 <i>df</i> (1,150)	.00	.37	.00	Contingent Reward
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.44	.19	36.34 <i>df</i> (1,94)	.00	.44	.00	Contingent Reward
2.	.46	.21	20.63 <i>df</i> (2,149)	.00	.40 .15		Contingent Reward, Management-by-exception (Active)
3.	.48	.23	15.46 <i>df</i> (3,148)	.00	.32 .17 -.16		Contingent Reward, Management-by-exception (Active), Laissez-faire

Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.35	.12	22.11 <i>df</i> (1,150)	.00	.35	.00	Contingent Reward

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.45	.20	38.23 <i>df</i> (1,150)	.00	.45	.00	Contingent Reward
2.	.48	.23	22.67 <i>df</i> (2,149)	.00	.40	.00	Contingent Reward
					.18	.02	Management-by-exception (Active)

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.35	.12	21.28 <i>df</i> (1,150)	.00	.35	.00	Contingent Reward

Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.31	.09	16.12 <i>df</i> (1, 150)	.00	.31	.00	Contingent Reward

Table 3.37: Correlation among Leadership and Organizational Learning for organizations with high score on Defender strategy (N = 93)

Leadership	Organizational Learning#							
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE
Idealized influence (Attributed)	.30**	.27**	.29**	.21*	.32**	.12	.20	.31**
Idealized influence (Behaviour)	.23*	.19	.26*	.15	.31**	.15	.33**	.24*
Inspirational Motivation	.17	.25*	.21*	.18	.22*	.14	.24*	.30**
Intellectual Stimulation	.34**	.33**	.29**	.27*	.34**	.22*	.19	.26*
Individualized Consideration	.22*	.18	.12	.19	.23*	.08	.059	.17
Contingent Reward	.39**	.38**	.37**	.33**	.39**	.27**	.31**	.41**
Management-by-exception (Active)	.00	.00	.00	.00	.00	.01	.00	.00
Management-by-exception (Passive)	.09	.020	.069	.013	.17	.04	.15	-.02
Laissez-faire	-.10	-.14	-.17	-.05	-.17	-.03	-.08	-.15

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with high score on Defender Strategy (N = 93)

Table 3.38: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.38	.15	16.14 <i>df</i> (1,91)	.00	.38	.00	Contingent Reward
2.	.43	.18	10.33 <i>df</i> (2,90)	.00	.61 -.29	.00 .02	Contingent Reward Inspirational Motivation
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.38	.14	15.40 <i>df</i> (1,91)	.00	.38	.00	Contingent Reward
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.37	.13	14.62 <i>df</i> (1,91)	.00	.37	.00	Contingent Reward
2.	.42	.17	9.79 <i>df</i> (2,90)	.00	.27 -.22	.01 .04	Contingent Reward Laissez-faire
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.33	.10	11.08 <i>df</i> (1,91)	.00	.33	.00	Contingent Reward

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.39	.15	16.43 <i>df</i> (1,91)	.00	.39	.00	Contingent Reward

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.26	.07	6.92 <i>df</i> (1,91)	.01	.26	.01	Contingent Reward

Dependent variable: Learning through Joint Ventures (LJV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.33	.10	11.13 <i>df</i> (1,91)	.00	.33	.00	Idealized influence (Behaviour)

Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.41	.17	18.71 <i>df</i> (1,91)	.00	.41	.00	Contingent Reward

Table 3.39: Correlation among Leadership and Organizational Learning for organizations with low score on Defender Strategy (N = 119)

Leadership	Organizational Learning#							
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE
Idealized influence (Attributed)	.31**	.29**	.35**	.26**	.42**	.32**	.10	.28**
Idealized influence (Behaviour)	.26**	.22*	.27**	.19*	.34**	.28**	.00	.43**
Inspirational Motivation	.27**	.17	.22*	.20*	.32**	.19*	.05	.24**
Intellectual Stimulation	.24**	.23*	.33**	.18*	.27**	.28**	.02	.33**
Individualized Consideration	.17	.12	.13	.12	.29**	.07	.00	.29**
Contingent Reward	.25**	.29**	.38**	.21*	.38**	.21*	.03	.32**
Management-by-exception (Active)	.27**	.33**	.29**	.25**	.21*	.25**	.18	.25**
Management-by-exception (Passive)	.04	-.08	-.21*	-.11	.03	-.07	.17	.03
Laissez-faire	-.04	-.06	-.23*	-.08	-.09	-.07	-.01	.02

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with low score on Defender (N = 119)

Table 3.40: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.30	.09	12.08 <i>df</i> (1,117)	.00	.30	.00	Idealized influence (Attributed)
2.	.35	.12	8.41 <i>df</i> (2,116)	.00	.38	.00	Idealized influence (Attributed), Management-by-exception(Passive)
3.	.39	.15	7.06 <i>df</i> (3,115)	.00	.32	.00	Idealized influence (Attributed), Management-by-exception(Passive), Management-by-exception(Active)
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	14.08 <i>df</i> (1,117)	.00	.32	.00	Management-by-exception(Active)
2.	.38	.14	9.92 <i>df</i> (2,116)	.00	.25	.01	Management-by-exception(Active), Idealized influence (Attributed)
Dependent variable: Emphasis on Interaction and Information Dissemination (FIID)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.38	.14	20.03 <i>df</i> (1,117)	.00	.38	.00	Contingent Reward

Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.26	.06	8.52 <i>df</i> (1,117)	.00	.26	.00	Idealized influence (Attributed)

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.42	.17	25.04 <i>df</i> (1,117)	.00	.42	.00	Idealized influence (Attributed)
2.	.47	.22	16.51 <i>df</i> (2,116)	.00	.51	.00	Idealized influence (Attributed), Management-by-exception(Passive)
					.23	.01	

Dependent variable: Sharing of Information (SI)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	13.40 <i>df</i> (1,117)	.00	.32	.00	Idealized influence (Attributed)

Dependent variable: Detection of Errors (DE)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.43	.18	27.03 <i>df</i> (1,117)	.00	.43	.00	Idealized influence (Behaviour)
2.	.47	.22	16.81 <i>df</i> (2,116)	.00	.51	.00	Idealized influence (Behaviour), Laissez-faire
					.20	.02	
3.	.51	.26	13.59 <i>df</i> (3,115)	.00	.38	.00	Idealized influence (Behaviour), Laissez-faire
					.32	.00	Laissez-faire
					.27	.02	Contingent Reward

Table 3.41: Correlation among Leadership and Organizational Learning for organizations with high score on Prospector Strategy (N = 108)

Leadership	Organizational Learning#							
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE
Idealized influence (Attributed)	.39**	.37**	.44**	.30**	.45**	.33**	.16	.32**
Idealized influence (Behaviour)	.28**	.29**	.35**	.27**	.41**	.24*	.25**	.35**
Inspirational Motivation	.35**	.29**	.33**	.26**	.39**	.23*	.16	.33**
Intellectual Stimulation	.40**	.44**	.44**	.41**	.46**	.43**	.18	.25**
Individualized Consideration	.32**	.24*	.27**	.25**	.34**	.20*	.18	.25*
Contingent Reward	.39**	.39**	.41**	.38**	.50**	.38**	.29**	.36**
Management-by-exception (Active)	.22*	.19	.20*	.22*	.30**	.12	.18	.13
Management-by-exception (Passive)	-.07	-.08	-.18	-.07	-.14	-.05	.07	-.01
Laissez-faire	-.26**	-.27**	-.36**	-.24*	-.28**	-.28**	-.15	-.08

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with high score on Prospector Strategy (N = 108)

Table 3.42: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (FIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LTV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.40	.16	20.64 <i>df</i> (1,106)	.00	.40	.00	Intellectual Stimulation
2.	.44	.19	12.79 <i>df</i> (2,105)	.00	.26 .23	.02 .04	Intellectual Stimulation, Idealized Influence (Attributed)
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.43	.19	25.10 <i>df</i> (1,106)	.00	.43	.00	Intellectual Stimulation
Dependent variable: Emphasis on Interaction and Information Dissemination (FIID)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.44	.19	26.01 <i>df</i> (1,106)	.00	.44	.00	Intellectual Stimulation
2.	.48	.23	16.45 <i>df</i> (2,105)	.00	.28 .26	.01 .02	Intellectual Stimulation, Idealized Influence (Attributed)
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsqr	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.40	.16	21.22 <i>df</i> (1,106)	.00	.40	.00	Intellectual Stimulation

Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.50	.25	35.33 <i>df</i> (1,106)	.00	.50	.00	Contingent Reward
2.	.53	.28	20.51 <i>df</i> (2,105)	.00	.34	.00	Contingent Reward
					.23	.04	Intellectual Stimulation
Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.43	.18	24.44 <i>df</i> (1,106)	.00	.43	.00	Intellectual Stimulation
Dependent variable: Learning through Joint Ventures (LTV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.29	.08	9.85 <i>df</i> (1,106)	.00	.29	.00	Contingent Reward.
Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.35	.12	15.38 <i>df</i> (1,106)	.00	.35	.00	Contingent Reward

Table 3.43: Correlation among Leadership and Organizational Learning for organizations with low score on Prospector Strategy (N = 118)

Leadership	Organizational Learning#							
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE
Idealized influence (Attributed)	.26**	.22*	.28**	.25**	.29**	.14	.21*	.33**
Idealized influence (Behaviour)	.30**	.18	.29**	.19*	.28**	.21*	.23*	.39**
Inspirational Motivation	.18*	.19*	.21*	.22*	.17	.13	.19*	.29**
Intellectual Stimulation	.23*	.16	.24**	.12	.19*	.14	.08	.33**
Individualized Consideration	.13	.09	.12	.13	.21*	-.00	.10	.22*
Contingent Reward	.28**	.26**	.35**	.23*	.29**	.13	.15	.39**
Management-by-exception (Active)	.23*	.20*	.21*	.19*	.12	.25**	.20*	.16
Management-by-exception (Passive)	.05	-.09	-.11	-.09	.02	-.06	.12	-.06
Laissez-faire	.01	-.04	-.16	-.01	-.01	-.05	-.01	-.17

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with low score on Prospector Strategy (N = 118)

Table 3.44: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (FIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LTV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.30	.09	11.88 <i>df</i> (1,116)	.00	.30	.00	Idealized influence (Behaviour)
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.26	.06	8.62 <i>df</i> (1,116)	.00	.26	.00	Contingent Reward
Dependent variable: Emphasis on Interaction and Information Dissemination (FIID)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.35	.12	16.62 <i>df</i> (1,116)	.00	.35	.00	Contingent Reward
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.25	.06	7.90 <i>df</i> (1,116)	.01	.25	.01	Idealized influence (Attributed)
Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.29	.08	10.79 <i>df</i> (1,116)	.00	.29	.00	Idealized influence (Attributed)

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.25	.06	7.84 <i>df</i> (1,116)	.00	.25	.00	Management- by-exception (Active)

Dependent variable: Learning through Joint Ventures (LTV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.22	.05	6.26 <i>df</i> (1,116)	.01	.22	.01	Idealized Influence (Behaviour)
2.	.28	.08	5.19 <i>df</i> (2,115)	.01	.27	.00	Idealized Influence (Behaviour)
					.20	.02	Management- by-exception (Passive)

Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.39	.15	21.24 <i>df</i> (1,116)	.00	.39	.00	Idealized Influence (Behaviour)

Table 3.45: Correlation among Leadership and Organizational Learning for organizations with high score on Analyzer Strategy (N = 88)

Leadership	Organizational Learning#							
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE
Idealized influence (Attributed)	.40**	.32**	.42**	.27*	.40**	.34**	.14	.35**
Idealized influence (Behaviour)	.28**	.21*	.34**	.19	.40**	.31**	.25*	.37**
Inspirational Motivation	.28**	.23*	.31**	.23*	.35**	.22*	.20	.34**
Intellectual Stimulation	.42**	.41**	.46**	.35**	.45**	.45**	.26*	.37**
Individualized Consideration	.25*	.15	.19	.13	.28**	.15	.05	.27*
Contingent Reward	.42**	.39**	.46**	.34**	.47**	.33**	.31**	.40**
Management-by-exception (Active)	.03	.05	.08	.04	.09	.03	.17	.08
Management-by-exception (Passive)	-.14	-.14	-.23*	-.12	-.22*	-.05	.11	-.16
Laissez-faire	-.31**	-.24*	-.40**	-.22*	-.29**	-.21*	-.15	-.22*

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with high score on Analyzer Strategy (N = 88)

Table 3.46: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.42	.17	18.75 <i>df</i> (1,86)	.00	.42	.00	Intellectual Stimulation
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.41	.17	17.70 <i>df</i> (1,86)	.00	.41	.00	Intellectual Stimulation
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.46	.21	23.24 <i>df</i> (1,86)	.00	.46	.00	Contingent Reward
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.35	.12	12.09 <i>df</i> (1,86)	.00	.35	.00	Intellectual Stimulation
Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.47	.22	24.57 <i>df</i> (1,86)	.00	.47	.00	Contingent Reward

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.44	.20	21.62 <i>df</i> (1,86)	.00	.44	.00	Intellectual Stimulation

Dependent variable: Learning through Joint Ventures (LJV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.30	.09	9.07 <i>df</i> (1,86)	.00	.30	.00	Contingent Reward
2.	.38	.14	7.20 <i>df</i> (2,85)	.00	.38	.00	Contingent Reward
					.23	.02	Management-by-exception(Passive)

Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.39	.15	16.27 <i>df</i> (1,86)	.00	.39	.00	Contingent Reward

Table 3.47: Correlation among Leadership and Organizational Learning for organizations with low score on Analyzer Strategy (N = 125)

Leadership	Organizational Learning#							
	FLP	UE	EIID	SRI	FDP	SI	LJV	DE
Idealized influence (Attributed)	.30**	.34**	.35**	.31**	.40**	.17	.26**	.30**
Idealized influence (Behaviour)	.31**	.30**	.31**	.29**	.32**	.21*	.33**	.34**
Inspirational Motivation	.31**	.32**	.28**	.29**	.26**	.20*	.21*	.31**
Intellectual Stimulation	.29**	.25**	.29**	.24**	.27**	.22*	.12	.20*
Individualized Consideration	.25**	.23*	.20*	.30**	.32**	.09	.15	.21*
Contingent Reward	.30**	.31**	.34**	.29**	.35**	.25**	.25**	.32**
Management-by-exception (Active)	.31**	.27**	.25**	.26**	.30**	.26**	.18*	.18*
Management-by-exception (Passive)	.03	-.08	-.14	-.07	.01	-.13	-.08	.08
Laissez-faire	-.02	-.14	-.21*	-.09	-.06	-.18*	-.15	-.02

#Organizational Learning - Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

** = $p < .01$; * = $p < .05$

Organizations with low score on Analyzer Strategy (N = 125)

Table 3.48: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception(Passive), Laissez-faire leadership

Dependent Variable: Dimension of Organizational Learning (8): Formalized Learning Procedures (FLP), Upgradation of Expertise (UE), Emphasis on Interaction and Information Dissemination (EIID), Storage and Retrieval of Information (SRI), Formal Documentation Procedures (FDP), Sharing of Information (SI), Learning through Joint Ventures (LJV), Detection of Errors (DE)

Dependent variable: Formalized Learning Procedures (FLP)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.31	.09	13.36 <i>df</i> (1,123)	.00	.31	.00	Idealized influence (Behaviour)
Dependent variable: Upgradation of Expertise (UE)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.33	.11	15.95 <i>df</i> (1,123)	.00	.33	.00	Idealized influence (Attributed)
Dependent variable: Emphasis on Interaction and Information Dissemination (EIID)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.35	.12	17.38 <i>df</i> (1,123)	.00	.35	.00	Idealised Influence (Attributed)
Dependent variable: Storage and Retrieval of Information (SRI)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.30	.09	12.57 <i>df</i> (1,123)	.00	.30	.00	Idealised Influence (Attributed)
Dependent variable: Formal Documentation Procedures (FDP)							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.39	.15	22.96 <i>df</i> (1,123)	.00	.39	.00	Idealised Influence (Attributed)

Dependent variable: Sharing of Information (SI)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.25	.06	8.52 <i>df</i> (1,123)	.00	.25	.00	Management- by-exception (Active)

Dependent variable: Learning through Joint Ventures (LJV)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	14.66 <i>df</i> (1,123)	.00	.32	.00	Idealized Influence (Behaviour)

Dependent variable: Detection of Errors (DE)							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.34	.11	16.28 <i>df</i> (1,123)	.00	.34	.00	Idealized Influence (Behaviour)

Table 3.49: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic (N=286)

Dependent variable: Intrinsic Satisfaction							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.39	.15	52.63 <i>df</i> (1,284)	.00	.39	.00	Idealized Influence (Attributed)
2.	.43	.18	32.63 <i>df</i> (2,283)	.00	.24	.00	Idealized Influence (Attributed),
					.23	.00	Intellectual Stimulation
Dependent variable: Social Satisfaction							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.36	.13	42.45 <i>df</i> (1,284)	.00	-.36	.00	Laissez-faire leadership
2.	.40	.16	27.79 <i>df</i> (2,283)	.00	-.28	.00	Laissez-faire leadership,
					.19	.00	Intellectual Stimulation
Dependent variable: Extrinsic Satisfaction							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.29	.08	26.91 <i>df</i> (1,284)	.00	.29	.00	Intellectual Stimulation
2.	.32	.10	16.23 <i>df</i> (2,283)	.00	.18	.01	Intellectual Stimulation,
					.16	.02	Idealized Influence (Attributed)

Organizations with high score on Synergetic Culture (N = 159)

Table 3.50: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic Satisfaction

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.41	.16	31.84 <i>df(1,157)</i>	.00	.41	.00	Idealized influence (Attributed)
Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.30	.09	15.74 <i>df(1,157)</i>	.00	.30	.00	Inspirational Motivation
Dependent variable: Extrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.22	.05	8.71 <i>df(1,157)</i>	.00	.22	.00	Intellectual Stimulation

Organizations with low score on Synergetic Culture (N = 96)

Table 3.51: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	10.95 <i>df</i> (1,94)	.00	.32	.00	Idealized influence (Attributed)
2.	.38	.14	8.04 <i>df</i> (2,93)	.00	.49	.00	Idealized influence (Attributed),
					-.27	.03	Idealized influence (Behaviour),
3.	.48	.23	9.65 <i>df</i> (3,92)	.00	.39	.00	Idealized influence (Attributed),
					-.52	.00	Idealized influence (Behaviour),
					.45	.00	Intellectual Stimulation
4.	.52	.27	8.81 <i>df</i> (4,91)	.00	.42	.00	Idealized influence (Attributed),
					-.45	.00	Idealized influence (Behaviour),
					.53	.00	Intellectual Stimulation,
					-.26	.03	Inspirational Motivation
5.	.55	.31	8.08 <i>df</i> (5,90)	.00	.33	.01	Idealized influence (Attributed),
					-.54	.00	Idealized influence (Behaviour),
					.45	.00	Intellectual Stimulation,
					-.36	.01	Inspirational Motivation
					.35	.05	Contingent Reward

Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.42	.18	20.95 <i>df</i> (1,94)	.00	-.42	.00	Management-by-exception (Passive)
2.	.47	.23	13.87 <i>df</i> (2,93)	.00	-.33 .23	.00 .02	Management-by-exception (Passive), Idealized influence (Attributed)
3.	.52	.27	11.57 <i>df</i> (3,92)	.00	-.35 .34 -.24	.00 .00 .02	Management-by-exception (Passive), Idealized influence (Attributed), Inspirational Motivation
Dependent variable: Extrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.35	.12	13.53 <i>df</i> (1,94)	.00	.35	.00	Contingent Reward

Organizations with high score on Closed Culture (N = 101)

Table 3.52: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.45	.20	25.35 <i>df</i> (1,99)	.00	.45	.00	Intellectual Stimulation
2.	.48	.23	15.06 <i>df</i> (2,98)	.00	.31	.00	Intellectual Stimulation
					.22	.05	Idealized influence (Attributed)
Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.34	.11	13.03 <i>df</i> (1,99)	.00	.34	.00	Intellectual Stimulation
2.	.40	.16	9.70 <i>df</i> (2,98)	.00	.27	.01	Intellectual Stimulation
					-.23	.02	Management-by-exception (Passive)
Dependent variable: Extrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.29	.08	9.34 <i>df</i> (1,99)	.00	.29	.00	Intellectual Stimulation

Organizations with low score on Closed Culture (N = 143)

Table 3.53: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.40	.16	27.36 <i>df</i> (1,141)	.00	.40	.00	Idealized influence (Attributed)
2.	.45	.20	17.89 <i>df</i> (2,140)	.00	.26	.00	Idealized influence (Attributed),
					-.24	.01	Laissez-faire
Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.43	.18	32.27 <i>df</i> (1,141)	.00	-.43	.00	Laissez-faire
2.	.46	.22	19.76 <i>df</i> (2,140)	.00	-.35	.00	Laissez-faire
					.20	.02	Intellectual Stimulation
Dependent variable: Extrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.22	.04	7.14 <i>df</i> (1,141)	.00	.22	.00	Idealized Influence (Attributed)

Organizations with high score on Employee Oriented Culture (N = 57)

Table 3.54: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.50	.25	18.55 <i>df</i> (1,55)	.00	.50	.00	Idealized Influence (Behaviour)
Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	6.25 <i>df</i> (1,55)	.02	.32	.02	Intellectual Stimulation
Dependent variable: Extrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.29	.08	5.30 <i>df</i> (1,55)	.03	.29	.03	Intellectual Stimulation

Organizations with low score on Employee Oriented Culture (N = 142)

Table 3.55: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.36	.13	20.85 <i>df</i> (1,140)	.00	.36	.00	Intellectual Stimulation
Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.40	.16	28.13 <i>df</i> (1,140)	.00	-.40	.00	Laissez-faire
2.	.44	.19	16.78 <i>df</i> (2,139)	.00	-.34 .17	.00 .03	Laissez-faire Intellectual Stimulation
Dependent variable: Extrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.38	.14	23.81 <i>df</i> (1,140)	.00	.38	.00	Idealized Influence (Behaviour)

Organizations with high score on Result Oriented Culture (N = 124)

Table 3.56: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.48	.23	37.84 <i>df</i> (1,122)	.00	.48	.00	Idealized influence (Attributed)
Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.44	.19	30.17 <i>df</i> (1,122)	.00	-.44	.00	Management-by-exception (Passive),
2.	.52	.27	22.92 <i>df</i> (2,121)	.00	-.33	.00	Management-by-exception (Passive),
					.29	.00	Idealized influence (Attributed)
Dependent variable: Extrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.38	.14	20.67 <i>df</i> (1,122)	.00	.38	.00	Contingent Reward

Organizations with low score on Result Oriented Culture (N = 27)

Table 3.57: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.76	.58	35.43 <i>df</i> (1,25)	.00	.76	.00	Intellectual Stimulation
2.	.82	.68	25.61 <i>df</i> (2,24)	.00	.63 -.33	.00 .01	Intellectual Stimulation, Laissez-faire
Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.62	.39	16.25 <i>df</i> (1,25)	.00	.62	.00	Intellectual Stimulation
2.	.70	.49	11.52 <i>df</i> (2,24)	.00	.49 -.33	.01 .04	Intellectual Stimulation, Laissez-faire
Dependent variable: Extrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.55	.30	11.07 <i>df</i> (1,25)	.00	.55	.00	Idealized influence (Behaviour)

Organizations with high score on Job Oriented Culture (N = 14)

Table 3.58: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.75	.57	16.00 <i>df(1,12)</i>	.00	.75	.01	Intellectual Stimulation

Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.62	.38	7.50 <i>df(1,12)</i>	.02	-.62	.02	Laissez-faire

Organizations with low score on Job Oriented Culture (N =152)

Table 3.59: Multiple Regression Analysis

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.40	.16	29.89 <i>df</i> (1,150)	.00	.40	.00	Intellectual Stimulation
2.	.43	.19	17.56 <i>df</i> (2,149)	.00	.26	.01	Intellectual Stimulation,
					.21	.04	Idealized influence (Behaviour)
Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.32	.10	17.45 <i>df</i> (1,150)	.00	.32	.00	Intellectual Stimulation
2.	.36	.13	11.68 <i>df</i> (2,149)	.00	.26	.00	Intellectual Stimulation,
					-.18	.02	Laissez-faire
Dependent variable: Extrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.35	.12	21.88 <i>df</i> (1,150)	.00	.35	.00	Intellectual Stimulation
2.	.39	.15	13.39 <i>df</i> (2,149)	.00	.30	.00	Intellectual Stimulation,
					-.16	.04	Laissez-faire

Table 3.60: Correlation between Leadership and Job Satisfaction for organizations with high score on Organizational Learning (N=124)

Leadership	Job Satisfaction		
	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.21*	.23*	.17
Idealized influence (Behaviour)	.16	.12	.06
Inspirational Motivation	.19*	.23**	.07
Intellectual Stimulation	.27**	.24**	.20*
Individualized Consideration	.15	.06	.02
Contingent Reward	.30**	.31**	.21*
Management-by-exception (Active)	-.02	-.03	.20
Management-by-exception (Passive)	-.16	-.34**	-.02
Laissez-faire leadership	-.30**	-.37**	-.17

** = $p < .01$; * = $p < .05$

Organizations with high score on Organizational Learning (N = 124)

Table 3.61: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership
Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic Satisfaction

Dependent variable: Intrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.30	.09	12.44 <i>df</i> (1,122)	.00	.30	.00	Contingent Reward
Dependent variable: Social							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.36	.13	19.19 <i>df</i> (1,122)	.00	-.36	.00	Laissez-faire
Dependent variable: Extrinsic							
Step	R	Rsq	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.20	.04	5.53 <i>df</i> (1,122)	.02	.20	.02	Contingent Reward

Table 3.62: Correlation between Leadership and Job Satisfaction for organizations with low score on Organizational Learning (N = 162)

Leadership	Job Satisfaction		
	Intrinsic	Social	Extrinsic
Idealized influence (Attributed)	.47**	.35**	.27**
Idealized influence (Behaviour)	.34**	.22**	.30**
Inspirational Motivation	.29**	.17*	.18*
Intellectual Stimulation	.44**	.30**	.28**
Individualized Consideration	.26**	.16*	.20*
Contingent Reward	.30**	.21**	.19*
Management-by-exception (Active)	.17*	.10	.12
Management-by-exception (Passive)	-.27**	-.33**	-.15
Laissez-faire leadership	-.29**	-.35**	-.18*

** = $p < .01$; * = $p < .05$

Organizations with low score on Organizational Learning (N = 162)

Table 3.63: **Multiple Regression Analysis**

Independent Variable: Dimension of Leadership (9): Idealized influence (Attributed), Idealized influence (Behaviour), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-exception (Active), Management-by-exception (Passive), Laissez-faire leadership

Dependent Variable: Dimension of Job Satisfaction (3): Intrinsic, Social and Extrinsic

Dependent variable: Intrinsic							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.47	.22	45.69 <i>df</i> (1,160)	.00	.47	.00	Idealized influence (Attributed)
2.	.50	.25	26.77 <i>df</i> (2,159)	.00	.31	.00	Idealized influence (Attributed),
					.23	.01	Intellectual Stimulation
3.	.52	.27	20.11 <i>df</i> (3,158)	.00	.42	.00	Idealized influence (Attributed),
					.30	.00	Intellectual Stimulation,
					-.22	.00	Individualized Consideration
Dependent variable: Social							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.34	.12	22.19 <i>df</i> (1,160)	.00	-.34	.00	Laissez-faire
2.	.39	.15	15.07 <i>df</i> (2,159)	.00	-.27	.00	Laissez-faire
					.20	.01	Intellectual Stimulation
Dependent variable: Extrinsic							
Step	R	Rsqu	F (Eqn)	Sig of F	β	Sig of β	Variables
1.	.30	.09	16.17 <i>df</i> (1,160)	.00	.30	.00	Idealized Influence (Behaviour)

Chapter 4

General Discussion

The earlier two chapters, that is, Chapter 2 and Chapter 3 have reported the results of the three studies (Study 1, Study 2A and Study 2B) which were designed to find answers to the research questions raised in Chapter 1. This chapter (Chapter 4) will present a general discussion of the results of these three studies and it comprises of two sections. *Section 1* is an integration of the results obtained in Study 2A and 2B and an amalgamated general discussion of these results. *Section 2* is an overall discussion of the three studies, that is, Study 1, Study 2A and Study 2B. The discussions are presented below.

Section 1

From a review of the literature on organizational learning and the various factors which affect it, as reported in Chapter 1, the following research questions were framed and Study 2A was conducted to answer them - (1) what are the different leadership styles which have impact on organizational learning and the nature of their relationships, (2) what are the certain kinds of organizational cultures which are prerequisite for organizational learning and how they affect organizational learning, (3) how do the different strategies adopted by the organization affect organizational learning, and finally (4) what is the impact of these variables on job satisfaction? Therefore, hypotheses were framed in reference to these questions. To augment the results of this quantitative study, Study 2B, which is a qualitative study, was carried out simultaneously using interview method. These interviews were conducted on top management of the organizations from which data were collected for Study 2A. Therefore, the result of this study would provide the outlook and opinions of the top management on the concept of organizational learning, its relationship with the various factors and finally, its outcome.

The first two hypotheses of Study 2A, that is, hypotheses 1A and 1B were in reference to the relation between leadership and organizational learning and it was hypothesized that there will be positive relationship between leadership (transformational and transactional) and organizational learning and secondly, there will be negative relationship between laissez-faire leadership and organizational learning. It was found that Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation and Individualized Consideration of transformational leadership and Contingent Reward of transactional leadership have significant positive relationship and are also the significant predictors of most of the dimensions of organizational learning, except Learning through Joint Ventures. Most of the recent studies on the relation between leadership and organizational learning (Lipshitz et al., 2002; Amitay et al., 2005; Chang & Lee, 2007; Garcia-Morales et al., 2008) have focused more on the transformational leaders and its positive influence on organizational learning while less attention has been given to the impact of transactional leadership. But, recent theoretical developments have emphasized the importance of a contingent approach toward leadership and organizational learning (Vera & Crossan, 2004). In the present study, it was found that Contingent Reward behaviour of transactional leaders also play important role in influencing organizational learning, besides the transformational style. This can be attributed to the fact that Contingent Reward leadership behaviour enables followers to perceive the consistency in leadership behaviour as well as the reliability of their leaders (Zagorsek et al., 2009). Transactional leadership is a “necessary precondition for transformational leadership to be effective...” (Avolio, 1999), because the leader secures transactional agreements with the followers by providing a clear picture about the requirements of the job and rewards them in exchange for satisfactorily carrying out the assignment, which helps to “make the use of transformational leadership behaviours less confusing and ambiguous” (Hinkin & Schriesheim, 2008a). Moreover, it helps to establish a relation between the leaders and the followers, which is based on trust, dependability, and perceptions of consistency of leader’s behaviour (Avolio & Bass, 1991). This further ensures the subordinates to engage in activities which facilitate

the learning processes that contribute to the performance of the organization. In a very recent study reported by Jansen et al. (2009), it was observed that both transformational and transactional leadership contributes to organizational learning outcomes, which they have conceptualized as exploratory and exploitative innovation. It was found in their study, that transformational leadership behaviors contribute significantly to adopting “generative thinking and pursuing exploratory innovation” (Sosik, Avolio & Kahai, 1997) which imply that transformational leadership style is effective in encouraging the organizational members to question the existing learning practices prevalent in an organization and this helps to generate new knowledge which ultimately contributes to the development of new products and services for emerging customers and markets. Transactional leadership behaviors, on the other hand, helps in maintaining and refining the existing competencies, products, and services (Vera & Crossan, 2004) which facilitate “improving and extending existing knowledge and is associated with exploitative innovation”. These results support the theoretical proposition of Vera and Crossan (2004) regarding the relationship between transactional/transformational (T/T) leadership behaviors and organizational learning. Moreover, by incorporating innovation outcomes, Jansen et al. (2009) have extended the theory proposed by Vera and Crossan (2004) and have “moved a step closer to examining the financial performance implications that may be associated with these processes”. These assertions are in line with the observations of the top management as reported in Study 2B, in which most of the top bosses interviewed stated that organizational learning contributes to innovation and creativity, which ultimately helps the organizations to gain competitive advantage and consequently, has an impact on financial performance of the organizations.

The results of the qualitative study (Study 2B) regarding the role of leadership with respect to organizational learning was also similar to Study 2A, that is, both transactional and transformational leadership styles play important role in facilitating organizational learning. However, it was observed that, in some cases, there was more use and preference for transformational leadership style. The type of

leadership style found in the present research, that is, a combination of some of the behaviours and attributes of both transactional and transformational leadership styles, gets some support even from some old but important studies in Indian work settings, which is characterized by subordinates' preference for personalized and dependency relationship. This style has been termed as "nurturant-task" by Sinha (1979, 1981). Such leadership style is exemplified by strong emphasis on task accomplishment, high standard of performance, clarity of expected roles intermingled with affection and care for the subordinate (Sinha, 1979). Such leader initiates and leads the subordinates, and makes them realize that they can grow by developing better job skills, positive work values and work commitment. However, such caring attitude of the leader is contingent on the subordinates' effective performance on the job (Habibullah & Sinha, 1980). This finding also implies that, though there have been tremendous changes in the work settings during these years, still this leadership style works. Therefore, the results of these studies further lend credence to the effectiveness of "nurturant-task" leadership style in Indian organizations.

It was also found that Hypothesis 1B, which stated that there will be negative relationship between laissez-faire leadership and organizational learning, has also been supported. Similar findings have been reported in most of the earlier researches (Chang & Lee, 2007; Coad & Berry, 1998; Dum Dum, Lowe & Avolio, 2002). Such leadership style is passive and there is neither an attempt to motivate the followers nor timely response to their needs. This consequently has negative effect (Judge & Piccolo, 2004) or no effect on the performance of the subordinates (Hinkin & Schriesheim, 2008a). In a recent empirical study, Skogstad, Einarsen, Torsheim, Aasland and Hetland (2007) supported this assertion and concluded that "laissez-faire leadership behaviour is destructive leadership behaviour". Observations in this line have also been reported in earlier researches, which stated that laissez-faire leadership may not be the appropriate way to lead organizational members (Bass & Avolio, 1990; Den Hartog et al., 1997). An interesting finding in this study was also the negative relationship between Management-by-Exception (Passive) of transactional

leadership and all the dimensions of organizational learning. This leadership style is one of the most passive leadership styles in which the leader intervenes only when things have gone wrong. Though Bass and his colleagues have conceptualized Management-by-Exception (Passive) and Laissez-faire leadership as quite different constructs, but empirical studies have shown substantial overlap between them (Hinkin & Schriesheim, 2008b) and they have been termed as “passive/corrective leadership” (Avolio et al., 1999; Den Hartog et al., 1997). It was also found in the present study that the intercorrelation between Laissez-faire and Management-by-Exception (Passive) is quite high ($r = 0.73, p < .00$). This further supports the assertion regarding the overlap between these two aspects of leadership styles. Such leadership styles have been found to have negative consequences for the organizations (Bass et al., 2003; Dumdum et al., 2002) as was found in the present empirical study also, because these types of behaviours are “highly dissatisfying” for the employees (Avolio, 1999). Moreover, institutionalization and effective functioning of organizational learning mechanisms require active role of leaders. However, in the case of these two leadership behaviours, there is least involvement and guidance by the leaders. Therefore, lack of timely interventions and appropriate reinforcements following desired behaviour result in a decline in performance over time (Pithers, 1985) and consequently organizational learning is not facilitated under such leaders.

The present study also attempted to explore the moderating effect of organizational culture on the relationship between leadership and organizational learning. Various researchers have found that organizational culture has varying impact on the relationship between different leadership styles and subordinates' performance (Sinha, 2008). In this study (Study 2A) also, it was found that organizational culture enhanced the relationship between leadership and organizational learning in organizations with strong culture such as high Synergetic Culture, Closed Culture, and Employee Oriented Culture as compared to organizations with weak cultures. In the present context, strong organizational culture implies that the norms, values and beliefs in the organization are strongly held, well established (O'Reilly & Chatman, 1996) and have profound effect on the employees, while weak

organizational culture is one in which important assumptions or values are not widely shared in an organization, but rather vary from individual to individual or unit to unit (Glaser, 1983; Riley, 1983). The results support Hypothesis 1C, that is, there will be high positive relationship between leadership (transformational and transactional) and organizational learning in organizations with strong organizational culture as compared to those with weak organizational culture. Such culture is characterized by concern for the welfare of the employees. This type of culture encourages the employees to come out with ideas and opinions, to adhere to the rules and regulations of the organizations and to work for the benefit of the organization by putting their maximum effort and even taking risks. Such culture, which facilitates organizational learning, has also been found in earlier studies (Senge et al., 1999; Von Krogh, 1998; Gupta et al., 2000; Perez Lopez et al., 2004). Some components of the culture prevalent in these organizations have also been cited by the top bosses in Study 2B. Moreover, the results of Study 2B have provided more information on the different components of organizational culture which is conducive for organizational learning, *per se*. This culture, identified by the top management during the interviews, reflects the learning culture prevalent in organizations, which organizational learning theorists as well as practitioners have propagated (Argyris & Schon, 1978; Beer & Spector, 1993; Davies & Easterby-Smith, 1984; Lucas & Kline, 2008; Popper & Lipshitz, 1998). Such culture comprises of characteristics such as transparency, accountability, trust, openness, accessibility of the leaders, etc.

The creation of a learning culture depends on the strategic leader (Hurley & Hult, 1998; McGill & Slocum, 1993) and how well that leader can balance transactional and transformational behaviors, authoritarian and participative systems, and task and relationship orientations (Schein, 1992). In this study, it was found that leaders use a combination of both transformational and transactional leadership styles, in accordance to the organizational culture prevalent in the organizations, to influence the behaviours of the organizational members to contribute to organizational learning. Such interplay of leadership styles functions well in Indian organizations, in

which employees generally have preference for personalized relationship, affective authority and a need for nurturance (Kavitha, 2000). The results of the qualitative study also revealed that leaders play vital role in inculcating a free and open organizational culture which allows free flow and sharing of information. Similar observation was also noted by Schein (1992) who found that leaders have a significant influence in creating and maintaining organizational culture.

Another important question was regarding how the different strategies adopted by the organization affect organizational learning. It was found that high Prospector and Analyzer strategies have more influence on organizational learning as compared to those low on these strategies and therefore, this result supported Hypothesis 1E. Such results were observed in earlier studies also. For example, Pedler, Burgoyne and Boydell (1991) have stressed the importance of analytical approach to strategy that contribute to learning, while Senge (1990) have pointed out that future oriented strategy is critical for the creation of learning organization. However, mixed result was obtained in the case of Defender strategy. Therefore, it could be concluded from these results that organizational learning would be fostered in organizations whose strategies focus on innovation, seek new opportunities and is future oriented and think ahead of contemporaries. Such organizations also try to search deeper for the root cause of problems and find the best possible solutions (Venkatraman, 1989). Priority is also given on improving market position faster than its competitors. Other studies have also found that there is impact of organizational strategy on organizational learning and knowledge management (Zheng, Yang & McLean, 2009). The results of Study 2B also showed that proactive strategy helps the organizations to cope with the continuous changes taking place in the outside world. This, in a way, helps to remain competitive and sustain in the business world. Such strategy helps to envisage about the problems that are likely to come up due to various factors, such as changes taking place in the outside world, tough competition from the competitors and uncertain market. The Prospector strategy also helps the organization to allocate resources for bringing out innovative and creative products

ahead of their competitors. Consequently, this approach provides “competitive advantage” which gives them an edge over their competitors in the market.

However, achieving this state involves the intervention of top management because it is the top management of the organizations who envisions the goals of an organization and decides the path which should be followed by an organization to achieve its goals. It was observed in this study that in the case of Analyzer and Prospector strategies, it was Intellectual Stimulation of transformational leadership that played the important role in facilitating organizational learning because such strategies need the guidance and vision of leaders who can stimulate the organizational members to question and think differently as such strategies are likely to promote in individuals the desire for new challenges and opportunities, along with the habit of flexibility when acquiring new learning. While in the case of Defender Strategy, it was Contingent Reward of transactional leadership which played the important roles in facilitating organizational learning. A Defender Strategy is likely to promote avoidance of risk behaviour in individuals because such strategy is more focused on thriving in the market through their limited expertise and to provide incentives to achieve efficiency and stability in the market. Therefore, this characteristic of Defender Strategy is more in tune with Contingent Reward behaviour of the leader, which builds a transactional relationship with the subordinates by providing rewards in exchange for meeting the set goals of the organization and maintaining efficiency. Therefore such strategy and the leadership style complement each other and consequently, are effective in influencing the employees to engage in activities that contribute to learning within the organization. These findings are in line with similar argument given by Nahavandi (1993).

The final question was in respect to the impact of all these variables on job satisfaction. It was found that both transformational and transactional leadership have significant positive relationship with job satisfaction. This is in line with earlier findings (Daniels & Bailey, 1999; Gaertner, 2000; Judge & Piccolo, 2004; Yi Wu, 2009) which found that leadership behaviors related to inspiring teamwork, challenging

tradition, enabling others, setting examples, and rewarding high performance have been found to have significant effects on role clarity, self-efficacy, and job satisfaction. However, there were significant negative relationships of Management-by-Exception (Passive) and Laissez-faire leadership styles with the dimensions of job satisfaction. This implied that the more frequently the top management displays both of these ineffective and passive leadership styles, the employees are likely to experience less job satisfaction. This may be due to the fact that subordinates expect leaders to be more active and direct them and extend feedback in order to carry out their functions in an efficient manner. Therefore, when the subordinates do not receive what they expect from their leaders, they experience less job satisfaction.

It was also observed that organizational culture moderated the impact of leadership on job satisfaction. In the present study, it was observed that organizational culture enhanced the relationship between leadership and job satisfaction in organizations with strong organizational cultures like high Closed Culture and Employee-Oriented Culture, though mixed results were obtained. At the same time, organizational culture enhanced the relationship in low Synergetic Culture. These results partially support Hypothesis 2C which stated that there will be high positive relationship between leadership (transformational and transactional) and job satisfaction in organizations with strong organizational culture as compared to those with weak organizational culture; as high positive relationship were found in strong as well as weak cultures. In the present context, strong culture implied that the norms and values in the organization were well established and had profound effect on the employees. Hypothesis 2D is also partially supported as high negative relationship between laissez-faire leadership and job satisfaction are found in organizations with strong organizational culture as well as those with weak organizational culture.

Moreover, it is a combination of transactional and transformational leadership styles which play the vital roles of influencing the job satisfaction of the employees. Employees tend to be more satisfied when their managers are good

leaders. Considerable research has shown that leader behavior can have profound and consistent influence on several facets of employee satisfaction (Wi Yu, 2009). Earlier researches have shown that organizational culture play a key role in job satisfaction (Adkins & Caldwell, 2004; Johnson & McIntyre, 1998; Lund, 2003; Silverthorne, 2004) and in this study also, it was observed that organizational culture characterized by high concern for the welfare of the employees, both personal and professional, on the part of the management and which tries to adhere steadfastly to the rules and regulations of the organization enhanced the relationship between leadership and job satisfaction.

Attempt was also made to study the impact of organizational learning on the relationship between leadership and job satisfaction as it has been observed in literature that there is usually an assumption that organizational learning leads to positive outcome. Chiva and Alegre (2009) found a positive impact of organizational learning capability on job satisfaction. However, the result of this study partially supported the hypothesis that there is high impact of leadership (transactional and transformational) on job satisfaction in organizations with high focus on organizational learning while the reverse will be true in organizations with low focus on organizational learning. Contingent Reward of transactional Leadership played the most significant role in organizations with high focus on organizational learning as it provides role clarity and rewards the members when they perform their assigned jobs and so the members experienced satisfaction. Such transactional approach is necessary to convince people that learning, both at the individual and organizational level is beneficial at all levels (Zagorsek et al., 2009) while in organization with low focus on organizational learning, transformational leader was instrumental in providing satisfaction among its subordinates because transformational leaders, by their very behaviour of instilling the confidence, trust and belief in the subordinates is able to provide job satisfaction to the employees, despite the less opportunity for learning, which may be present in such organizations. Further exploration and comparison of the means of the three dimensions of job satisfaction between the two categories of high and low focus on organizational

learning revealed that there are significant differences in the job satisfaction dimensions among the two categories. It was also found that organizations with high focus on organizational learning have higher mean scores on all the dimensions of job satisfaction. These findings imply that though leadership did not have as much impact on job satisfaction as was expected in organizations with high focus on organizational learning as compared to those organizations low on it, still employees experience more job satisfaction in the former organizations as they get the opportunities to interact and learn from internal sources such as from their colleagues and seniors who were more experienced than themselves as well as from external agents. This learning helps them to improve and enrich their expertise and knowledge which paves the way for their growth. This, in turn, contributes to the better performance of the organization. Earlier studies have also found that organization which gives priority to learning, education and development has greater profitability and increased workers' job satisfaction (Filipczak, 1989; Leslie et al., 1998; Mulraney & Turner, 2001).

With respect to the different mechanisms used by different organizations to facilitate organizational learning, it was found from Study 2A that organizations mainly use mechanisms like Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors. In the case of Learning through Joint Ventures, it has significant correlation with the various leadership styles and is predicted by only Idealized Influence (Behaviour) in the stepwise multiple regression under the condition of the direct impact of leadership on organizational learning. However, when exploring the moderating effect of organizational culture on the relationship between leadership and organizational learning, it was observed that this dimension neither had significant correlation with the various leadership styles nor was it predicted by some of them in the stepwise multiple regression. This may be due to the fact that most of these organizations are public sector organizations in which decisions regarding interaction with external environment might require multi-point

clearance, including clearance from the Government in some cases and thus, the organization may face a lot of bottlenecks in trying to foster this mechanism of learning and acquiring knowledge. Though public sector companies have changed a lot in the face of stiff competition from multinational organizations, but still they face some constraints (Sinha, 2008), like entrenched bureaucratic culture, political interference, etc. Therefore, it may be difficult, though not impossible, to establish collaboration or alliances with other organizations because in such organizations, it takes time to initiate the process, to get the approval for it and finally implement the plan. Therefore, learning mainly takes place within the organization. Moreover, transfer of knowledge is easier within an organization than between organizations (Gupta & Govindarajan, 2000). Various factors that facilitate sharing and transfer of knowledge within organization, such as close “proximity of the organizational members, complementarities of activities, sharing of norms, values, strategies...” (Sinha, 2008) might have also favoured learning within organizations rather than through alliances with other organizations.

It was observed from the responses of the top bosses in Study 2B that organizations use different mechanisms similar to those stated in study 2A, to facilitate the sharing of experiences and knowledge amongst the employees. They have identified various formal and informal mechanisms. The formal mechanisms included training, seminars, meetings, periodicals, guideline books, newsletters, and bulletins. Emphasis was laid on the use of intranet and internet in disseminating information to the organizational members and also as a means of maintaining communications with them. While informal mechanisms comprised of quality circles, interaction among members in a team, informal networks such as ‘supervisors’ network’, “idea club”, etc.

It was also found that an important aspect of organizational learning, that is, “documentation, storage and retrieval of information” is given due emphasis in many organizations. This is evident from both Study 2A and 2B. In Study 2A, this is reflected in the dimension of organizational learning identified as *Formal*

Documentation Procedures and Storage and Retrieval of Information. While in Study 2B, this has been identified under the theme entitled “*documentation and retrieval of information*”. This helps the organization in maintaining the repertoire of knowledge which is used by the present members as well as by the future members. Moreover, it also helps in creating a corpus of knowledge, which will help the organizations to enrich their core competence, sustain in the market and become more competitive (DeGues, 1998).

Thus, it can be concluded that results of both the studies complement each other and helps in strengthening the concept of organizational learning, the various factors that affect it and finally, its contribution to the effective functioning and success of organizations.

Section 2

Section 2 is a general discussion of the results of the three studies, that is, Study 1, Study 2A and Study 2B.

Study 1 made an attempt to study the differences in organizational learning processes across different Indian organizations for example, banking sector and academic institute, as it was found from a review of literature that different organizations follow different organizational learning processes (Argote, 1999; Ellis & Shpielberg, 2003; Perrow, 1984). But the persistent question is what the differences in these processes are. Another point, which it attempted to explore, is the relationship between these different organizational learning processes and job satisfaction because different researchers have indicated important link between organizational learning and job satisfaction, but there are only few empirical studies that have tried to explore its links with job satisfaction (Chang & Lee, 2007; Chiva & Alegre, 2009).

It was found from this study that there are differences in the organizational learning processes across different organizations on all the four dimensions of

organizational learning, namely, Essential Processes of Organizational Learning, Interaction, Flexibility and Innovativeness. These dimensions were derived from the organizational learning measure, which comprised of 24 items and was developed by the researcher, using dimensions drawn from the study by Mehra and Dhawan (2003). Factor analysis yielded four dimensions of organizational learning mentioned above. However these differences depend on the need and demand of the environment in which the organization is functioning. As found in this study, the banking sector where the environment is quite turbulent, organizational learning exceeds as compared to that of the academic institute which functions in a fairly stable environment. Such result has also been found in earlier studies, for example, Ellis and Shpielberg (2003) found that organizations operating in uncertain environment differ in the intensity of the use of learning procedures from organizations functioning in relatively certain environment.

In Study 2A also, differences in the organizational learning processes were also found amongst the 15 organizations on all the dimensions of organizational learning, namely, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures, and Detection of Errors. Though the dimensions of organizational learning in Study 2A are not exactly same as that of Study 1 (as different questionnaires were used), still the factor structures of both the questionnaires share a great deal of similarity. Moreover, differences in the organizational learning processes found in Study 2A also provide evidence and further support that different organizations adopt different organizational learning processes. This difference may be due to various factors, such as the type of organizations, their business goals, environment in which these organizations function and ownership of the organizations (public sector, private sector, multinational, etc.).

Another aspect that this study (Study 1) tried to explore was the relationship between organizational learning and job satisfaction. It was evident from the result, that there is positive and significant correlation between all the factors of organizational learning and all the factors of job satisfaction in the sample drawn from academic institute while in the banking sector, there are significant positive correlations with only intrinsic and extrinsic satisfaction. There is even some support for these finding from Study 2A, as it was observed that organizations with high focus on organizational learning have higher mean scores on all the dimensions of job satisfaction as compared to those organizations with low focus on organizational learning. From these results, it could be concluded that organizational learning has positive effect on the performance of organizations, which in these two studies has been measured in terms of job satisfaction of the employees. Several studies have explored the relation between organizational learning and firm performance and have suggested positive association between these two (Bontis et al., 2002; Ellinger et al., 2002). Further support is extended by Egan, Yang and Bartlett (2004) who found that “organizational learning culture is associated positively with job satisfaction”. Also Chiva and Alegre (2009) conducted empirical study in the Spanish ceramic tile industry and obtained strong link between organizational learning capability and job satisfaction.

The observations from the qualitative study (Study 2B) further provide evidence for the assertion that organizational learning contributes to firm performance. The responses of the top bosses revealed that, it indeed, results in better performance and consequently, financial profitability of the organizations. In their opinion, this is evident from their better market share, increased turnover, etc. They also stated that it has helped the organization to sustain and remain successful in the market even in the present turbulent environment.

It is evident that the results of these three studies have supported most of the hypotheses framed in this research work which are in reference to the research questions raised in Chapter 1. It was found that organizational learning is a multi-

faceted process which is practiced by different organizations to different extent. Implementing this concept and practicing it fruitfully depends on various factors such as leadership style, organizational culture and strategy, beside others. It was found in this study that a leadership style comprising of characteristics of both transactional and transformational leadership style is the most effective one. Strong organizational culture characterized by concern for welfare of the employees and adherence to rules and regulations play crucial role. This type of culture also encourages the employees to come out with ideas and opinions, to adhere to the rules and regulations of the organizations and to work for the benefit of the organization by putting their maximum effort and even taking risks. There is also the influence of business strategy that is characterized by both analytic and proactive approach, on this relationship between leadership and organizational learning. Finally, the results of this study also revealed the positive impact of organizational learning on the job satisfaction of the employees.

Chapter 5

Summary, Conclusion, Implications and Limitations

The preceding chapters, that is, Chapter 2 and Chapter 3 have reported the results of the three studies (Study 1, Study 2A and Study 2B) which have answered most of the research questions raised in Chapter 1. While Chapter 4 has presented a general discussion of the results obtained from these studies. This chapter presents summary of all the three studies, conclusions, implications and contributions, in terms of theoretical, methodological and practical contributions. Further, limitations and directions for future research are discussed.

Summary

In recent years, the focus of most of the organizational studies has been on the ability of organizations to respond suitably to the continuous changes in the external environment (Llorens-Montes et al., 2005) because organizations are open systems which function in dynamic environment and their successful survival depends on their ability to learn and adapt to pressures as well as prospects presented by such environment (Burke, 2002; Katz & Kahn, 1978). Though various factors, such as, economic conditions, bad strategic decisions, changing technology, etc., play a role in “organizational demise” (Hannah & Lester, 2009); yet, Argyris and Schon (1978) as well as Mintzberg, Ahlstrand and Lampel (1998) suggest that this demise is often a result of an organization's failure to learn and subsequently adapt. Hence, it has been assumed that organizational learning is an important determinant of long-term performance and survival for organizations (DeGues, 1988; Garvin, 1993; Yukl, 2009).

However, despite the abundance of literature on this concept, “there was lack of cumulative and integrative work” (Lipshitz et al., 2002). Therefore, taking clues from the gaps in the conceptualization of organizational learning so far, an attempt was made in this research work to provide a basis for strengthening the

conceptualization of organizational learning by adopting a process-oriented view of organizational learning (e.g., Argyris & Schon, 1978; Crossan et al., 1999) because learning is seen as a continuous process which helps an organization to adapt successfully to the volatile external environment. It is also a way of improving and furthering the core competence of organizations, especially for knowledge driven organizations (Prahalad & Hamel, 1990). Therefore, the present research has attempted to provide a consolidated framework of organizational learning by adopting a process-oriented view of organizational learning and by incorporating conducive contextual factors which will allow the organizations to develop the learning processes. Formulating the framework necessitated to study the differences in organizational learning processes because organizations, functioning in different environments, adopt different organizational learning processes to remain competitive and also to be successful (Argote, 1999). Moreover, it is also important to explore how contextual factors like leadership, strategy and organizational culture affect these processes as these factors are seen as essential for initiation and effective implementation of organizational learning processes in organizations. Leaders play the most crucial role for initiating and instituting organizational learning in the organization (Ellis et al., 1999; Popper & Lipshitz, 2000) as leadership is often required in order to change the existing thinking and practice present in the organization. This change further helps to foster learning in the organization. Leaders can directly encourage and facilitate collective learning by what they say and do and they can indirectly influence it by creating cultures, systems and structures that foster the absorption, assimilation and application of knowledge (Kavanagh & Ashkanasy, 2006). It has also been observed that organizational culture acts as a system of social control and can influence employees' attitudes and behaviour through the values and beliefs propounded by the leaders (Flynn & Chatman, 2001; Schein, 1991, Sinha, 2008). Researchers and practitioners have identified many ways through which leaders can encourage and facilitate the process of collective learning in organizations, however, there is limited systematic empirical research directly linking leadership and organizational learning (Popper & Lipshitz, 2000; Berson et al., 2006). Apart from organizational culture, strategy is one of the "core" elements that is essential for

effective implementation of organizational learning (Fiol & Lyles, 1985; Francis & Mazany, 1996; Francis, 1997) as it influences the firm's learning by providing a boundary to decision making and a context for the perception and interpretation of the environment (Fiol & Lyles, 1985), so the researcher has also attempted to study how different types of strategies affect the organizational learning processes while considering the fact that the relationship between the two is bi-directional (Fiol & Lyles, 1985).

Since organizational learning provides the opportunities as well as the systems and mechanisms to the organizational members to acquire, create and utilize knowledge, it is considered as an important source of core competence of the organizations as it leads to better performance and in turn affects the satisfaction of the workforce (Gardiner & Whiting, 1997). Organizations which have given priority to creating learning opportunities and development, have reported greater profitability and increased workers' job satisfaction (Filipczak, 1989; Mulraney & Turner, 2001). Hence, an attempt was made to explore its effect on the job satisfaction of the organizational members.

Therefore, from the review of literature on organizational learning and the various factors which affect it as well as its outcome, the following research questions were framed and the present research attempted to answer them -

- 1) What are the differences in organizational learning processes across organizations?
- 2) What are the different leadership styles or combination of leadership styles that facilitate organizational learning?
- 3) What is the impact of top management leadership style on organizational learning?
- 4) Are there certain kinds of culture that are the prerequisite for organizational learning?

- 5) Which kind of culture promotes learning that is beneficial to the organization?
- 6) What is the role of strategies in the effective implementation of organizational learning process in an organization?
- 7) What is the impact of all these factors on the success of the organization?

In order to answer the above stated research questions, three studies, namely, Study 1, Study 2A & Study 2B were conducted for the present research work. Study 1 is a quantitative study which was conducted on a smaller sample (N = 140) to explore whether there are differences in organizational learning processes across different Indian organizations for example, in banking sector and academic institution. In most researches, it is considered prudent to test the basic research questions and hypotheses on a smaller sample and then embark on a larger project when there is enough indication about the validity of the propositions and the need to conduct deeper exploration about the same. Therefore, after having found the answer to the research question related to the differences in the organizational learning processes, the researcher conducted Study 2A on a larger sample (N = 286) to answer the remaining research questions regarding the nature of organizational learning taking place in organizations in the Indian settings, as well as the role of the various contextual factors and finally its impact on the performance of the organizations. Further, Study 2B, which is a qualitative study, was conducted to augment the results of the two quantitative studies (Study 1 and Study 2A). In this study, interviews were conducted on the top management (N = 29) of the organizations from which data were collected for Study 2A.

As evident from the review of literature, different organizations follow different organizational learning processes (Ellis & Shpielberg, 2003; Perrow, 1984). But the imminent question is what the differences in these processes are. Study 1 made an attempt to study the differences in organizational learning processes across different Indian organizations, that is, banking sector and academic institute. Another point which it attempted to explore is the relationship between these

different organizational learning processes and job satisfaction because different researchers have assumed the important positive outcomes of organizational learning, but there are only few empirical studies that have tried to explore its links with job satisfaction (Chang & Lee, 2007; Chiva & Alegre, 2009).

As already stated, this study was carried out on two samples. The first sample was drawn from banking sector in Guwahati city of Assam. The data were collected from 57 employees (male = 47 and female = 10) who had the minimum educational qualification of graduation. The mean and SD of the age of the employees and tenure in the present job were $M = 39.67$ years, $SD = 11.41$ and $M = 11.88$ years, $SD = 11.38$, respectively. The second sample consisted of 83 faculty members (male = 77, female = 6) who had the educational qualification of doctorate degree. The mean and SD of the age of the faculty members and tenure in the present job were $M = 36.40$ years, $SD = 5.15$ and $M = 3.87$ years, $SD = 3.13$, respectively. The subjects of both samples were contacted personally and were requested to fill the questionnaire, which consisted of measures of organizational learning and job satisfaction. Organizational Learning measure comprise of 24 items that were developed by the researcher, using dimensions drawn from the study by Mehra and Dhawan (2003). Factor analysis yielded four dimensions of organizational learning, namely, Essential Processes of Organizational Learning, Interaction, Flexibility and Innovativeness.

It was found from Study 1 that there are differences in the organizational learning processes across different organizations on all the four dimensions of organizational learning, namely, Essential Processes of Organizational Learning, Interaction, Flexibility and Innovativeness. However these differences depend on the need and demand of the environment in which the organization is functioning. As found in this study, the banking sector where the environment is quite turbulent, organizational learning exceed as compared to that of the academic institute which functions in a fairly stable environment. Such result has also been found in earlier studies, for example, Ellis & Shpielberg (2003) found that organizations operating in

uncertain environment differ in the intensity of the use of learning procedures from organizations functioning in relatively certain environment.

Therefore, after having found the answer to the research question related to the differences in the organizational learning processes, the researcher conducted Study 2A to answer the remaining research questions - (1) what are the different leadership styles which have impact on organizational learning and the nature of their relationships, (2) what are the certain kind of organizational culture which are prerequisite for organizational learning and what is its impact on organizational learning, (3) how do the different strategies adopted by the organization affect organizational learning, and finally (4) what is the impact of these variables on job satisfaction? Specific hypotheses were framed in reference to these questions.

Data for this study were collected from two different samples. The first one comprised of middle level managers (N = 286) from 15 different organizations (13 public sector and 2 private sector) located at three metropolitan cities (Delhi, Bangalore and Kolkata) and their mean age was 41.5 years (SD = 10.0) while the second sample consisted of top management of the organizations such as Executive Director and General Manager (N = 29, Male = 27, Female = 2) from 13 public sector organizations out of the 15 organizations from which data for Set 1 were collected. These top managers had the decision making power. Their mean age was 49.6 years (SD = 5.85). Data was collected through two sets of questionnaires. Set 1 comprised of four sections – leadership (Multifactor Leadership Questionnaire by Bass & Avolio, 2004), organizational learning (Ellis & Globerson, 1996), organizational culture (adapted from Hofstede, 1990) and job satisfaction (Schnake, 1983). It was administered on the first sample (N = 286). Set 2 consisted of measure of business strategy (Venkatraman, 1989) and it was administered on the second sample. Factor analysis using the principle component with varimax rotation was carried out on the items of organizational learning, organizational culture and job satisfaction questionnaire. However, in the case of Multifactor Leadership Questionnaire and business strategy, the original factor structures were used.

The results of this study showed that there were positive relationships between leadership (transformational and transactional leadership) and organizational learning. It was influenced by organizational culture characterized by concern for the welfare of the employees. This type of culture encourages the employees to come out with ideas and opinions, to adhere to the rules and regulations of the organizations and to work for the benefit of the organization by putting their maximum effort and even taking risks. There was also the influence of business strategy that is characterized by both analytic and proactive approach, on this relationship between leadership and organizational learning.

Then the qualitative study (Study 2B) was conducted to augment the results of quantitative studies (Study 1 and Study 2A). This study was basically designed to explore answers to the following questions (most of them were extensions of the questions in Study 1 and Study 2A) from the top management's point of view - (1) whether there is sharing of knowledge and information amongst the members of the organization, (2) what are the mechanisms that facilitate such processes, (3) whether these processes have impact on the performance of the organizations in terms of profitability of the organizations, (4) what are the role of leaders, organizational culture and strategies in terms facilitating these processes, and finally (5) whether the organizations, through these processes, are able to learn and then create knowledge base which would help the organization in innovation, in the future?

It was observed from the results of this study that organizational learning is taking place in these organizations and such organizations have adopted various formal (structured) and informal (unstructured) mechanisms to facilitate this process. The formal mechanisms included training, seminars, meetings, periodicals, guideline books, newsletters, and bulletins. There was also the use of intranet and internet in disseminating information to the organizational members and also as a means of maintaining communications with them. While informal mechanisms comprised of quality circles, interaction among members in a team, informal networks such as 'supervisors' network', "idea club", etc. It was also found that

leadership, comprising both transformational and transactional style, emerged as an important factor which influenced the learning and sharing of information and expertise that occurred in the organizations. While organizational culture present in their organizations comprised of characteristics such as transparency, accountability, trust, openness, accessibility of the leaders, etc. that are similar to the components of learning culture (Lucas & Kline, 2008; Popper & Lipshitz, 1998). The role of strategy was also evident in this study. It was observed that proactive strategy helped the organization to cope with the continuous changes in the external environment. One of the most important findings of this study was the impact of organizational learning on the performance of the organization. It was found that most of the respondents attribute the better performance and profitability of the organization to organizational learning. Moreover, it was observed from the opinion expressed by one of the top officials who gave due importance to the structure of the organization, that it helps to facilitate the process of sharing of knowledge and information. This signifies the importance of structure in effective functioning of organizational learning.

Conclusions

From the results of the three studies, the following conclusion can be drawn-

(1) Organizational learning and its mechanisms

It was found from Study 2A that organizations mainly use mechanisms like Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information and Detection of Errors. These mechanisms basically indicate the different learning processes used by the members of the organizations, such as meetings, continuous provision of information concerning the tasks in the organization, feedback systems, etc, and also the different ways in which the expertise of the members of the organization are

upgraded, through various individual and group training, rotation of roles, regular supply of professional and managerial literature, etc. These processes are more formal in nature. It is also carried out in an informal way when the members of the organization interact and willingly share information. There is also an emphasis on the extent to which information is provided and disseminated to the organizational members. Moreover, it was observed from the responses of the top bosses in Study 2B that organizations use different mechanisms similar to those stated above (Study 2A), to facilitate the sharing of experiences and knowledge amongst the organizational members. They have also identified various formal and informal mechanisms. The formal mechanisms included training, seminars, meetings, periodicals, guideline books, newsletters, and bulletins. Emphasis was laid on the use of intranet and internet in disseminating information to the organizational members and also as a means of maintaining communications with them. While informal mechanisms comprised of quality circles, interaction among members in a team, informal networks such as 'supervisors' network', "idea club", etc. It could therefore, be concluded that organizational learning is not a single process which is performed in a uniform manner in the organization, rather it comprises of different processes performed by different units in the organization in different capacities. It was also found that in the public sector organizations, more formal mechanisms were used to share the knowledge and information between the top management and the subordinates, while informal mechanisms were used during exchange of information among members of the same level. However, in this respect, there are enough indications about the changes that are taking place in organizations as some public sector organizations have also started giving emphasis to informal mechanisms of sharing and dissemination of information, even by the top management.

(2) Differences in organizational learning processes across organizations

It was found from Study 1 that there are differences in the organizational learning processes across different organizations on all the four dimensions of organizational learning, namely, Essential Processes of Organizational Learning,

Interaction, Flexibility and Innovativeness. However these differences depend on the need and demand of the environment in which the organization is functioning. As found in this study, the banking sector where the environment is quite turbulent, organizational learning exceeds as compared to that of the academic institute which functions in a fairly stable environment. Such result has also been found in earlier studies, for example, Ellis & Shpielberg (2003) found that organizations operating in uncertain environment differ in the intensity of the use of learning procedures from organizations functioning in relatively certain environment.

In Study 2A also, differences in the organizational learning processes was also found amongst the 15 organizations on all the dimensions of organizational learning, namely, Formalized Learning Procedures, Upgradation of Expertise, Emphasis on Interaction and Information Dissemination, Storage and Retrieval of Information, Formal Documentation Procedures, Sharing of Information, Learning through Joint Ventures, and Detection of Errors. These results provide evidence and further support that different organizations adopt different organizational learning processes. This difference may be due to various factors, such as the type of organizations, their business goals, environment in which these organizations function, ownership of the organizations (public sector, private sector, multinational).

(3) Relationship between leadership and organizational learning

It can be concluded from the studies conducted that Idealized Influence (Attributed), Idealized Influence (Behaviour), Inspirational Motivation, Intellectual Stimulation and Individualized Consideration of transformational leadership and Contingent Reward of transactional leadership have significant positive relationship and are also the significant predictors of most of the dimensions of organizational learning, except Learning through Joint Ventures. Most of the recent studies on the relationship between leadership and organizational learning (Lipshitz et al., 2002; Amitay et al., 2005; Chang & Lee, 2007; Garcia-Morales et al., 2008) have focused more

on the transformational leaders and its positive influence on organizational learning while less attention has been given to the impact of transactional leadership. But, recent theoretical developments have emphasized the importance of a contingent approach toward leadership and organizational learning (Vera & Crossan, 2004). In the present study, it was found that Contingent Reward behaviour of transactional leaders also play important role in influencing organizational learning, besides the transformational style. This can be attributed to the fact that Contingent Reward leadership behaviour enables followers to perceive the consistency in leadership behaviour as well as the reliability of their leaders (Zagorsek et al., 2009). Transactional leadership is a “necessary precondition for transformational leadership to be effective...” (Avolio, 1999), because the leader secures transactional agreements with the followers by providing a clear picture about the requirements of the job and rewards them in exchange for satisfactorily carrying out the assignment, which helps to “make the use of transformational leadership behaviours less confusing and ambiguous” (Hinkin & Schriesheim, 2008a). Moreover, it helps to establish a relation between the leaders and the followers, which is based on trust, dependability, and perceptions of consistency of leader’s behaviour (Avolio & Bass, 1991). This further ensures the subordinates to engage in activities which facilitate the learning processes that contribute to the performance of the organization. Therefore, this results supported Hypothesis 1A that there will be positive relationship between leadership (transformational and transactional) and organizational learning.

The results of the qualitative study (Study 2B) regarding the role of leadership with respect to organizational learning was also similar to Study 2A, that is, both transactional and transformational leadership style play important role in facilitating organizational learning. However, it was observed that, in some cases, there was more use and preference for transformational leadership style. In Indian work settings, which is characterized by subordinates’ preference for personalized and dependency relationship, “nurturant-task” leadership style is the most effective leadership style (Sinha, 1979). Such leadership style is exemplified by strong

emphasis on task accomplishment, high standard of performance, clarity of expected roles intermingled with affection and care for the subordinate (Sinha, 1979). This leadership style is quite similar to the kind of leadership style found in this research, that is, a combination of some of the behaviours and attributes of both transactional and transformational leadership styles. Therefore, the results of these studies further lend credence to the effectiveness of “nurturant-task” leadership style in Indian organizations.

It was also found that Hypothesis 1B, that is, there will be negative relationship between laissez-faire leadership and organizational learning has also been supported. Similar findings have been reported in most of the earlier researches (Chang & Lee, 2007; Coad & Berry, 1998; Dumdum et al., 2002). Such leadership style is passive and neither is there an attempt to motivate the followers nor timely response to their needs. This consequently has negative effect (Judge & Piccolo, 2004) or no effect on the performance of the subordinates (Hinkin & Schriesheim, 2008a). In a recent empirical study, Skogstad et al., (2007) supported this assertion and concluded that “laissez-faire leadership behaviour is destructive leadership behaviour”. Observations in this line have also been reported in earlier researches, which stated that laissez-faire leadership may not be the appropriate way to lead organizational members (Bass & Avolio, 1990; Den Hartog et al., 1997). It was also observed that there is negative relationship between Management-by-Exception (Passive) of transactional leadership and all the dimensions of organizational learning. This leadership style is one of the most passive leadership styles in which the leader intervenes only when things have gone wrong. Though Bass and his colleagues have conceptualized Management-by-Exception (Passive) and Laissez-faire leadership as quite different constructs, but empirical studies have shown substantial overlap between them (Hinkin & Schriesheim, 2008b) and they have been termed as “passive/corrective leadership” (Avolio et al., 1999; Den Hartog et al., 1997). It was found in this study also that the intercorrelation between Laissez-faire and Management-by-Exception (Passive) is quite high ($r = 0.73, p < .00$). Such leadership styles have been found to have negative consequences for the organizations (Bass et

al., 2003; Dumdum et al., 2002) as was found in the present empirical study also, because these type of behaviours are “highly dissatisfying” (Avolio, 1999) for the subordinates. Moreover, institutionalization and effective functioning of organizational learning mechanisms require active role of leaders. However, in the case of these two leadership behaviours, there is least involvement and guidance by the leaders. Therefore, lack of timely interventions and appropriate reinforcements following desired behaviour result in a decline in performance over time (Pithers, 1985) and consequently organizational learning is not facilitated under such leaders.

(4) The moderating effect of organizational culture on the relationship between leadership and organizational learning

In the present study, it was found that organizational culture enhanced the relationship between leadership and organizational learning in organizations with strong culture such as high Synergetic Culture, Closed Culture, and Employee Oriented Culture as compared to organizations with weak cultures. This supports Hypothesis 1C, that is, there will be high positive relationship between leadership (transformational and transactional) and organizational learning in organizations with strong organizational culture as compared to those with weak organizational culture. Such culture is characterized by care and concern for employees, willingness to take risks, encouragements to come out with ideas and opinions as well as adherence to the rules and regulations of the organizations. This kind of culture, which facilitates organizational learning, has also been found in earlier studies (Senge et al., 1999; Von Krogh, 1998; Gupta et al., 2000; Perez Lopez et al., 2004). Some components of the culture prevalent in these organizations have also been cited by the top bosses in Study 2B. In addition, the results of Study 2B have provided more information on the different components of organizational culture which is conducive for organizational learning *per se*. This culture which comprises of characteristics, such as, transparency, accountability, trust, openness, accessibility of the leaders, etc., reflects the learning culture prevalent in organizations, which organizational learning theorists as well as practitioners have propagated (Argyris &

Schon, 1978; Beer & Spector, 1993; Davies & Easterby-Smith, 1984; Lucas & Kline, 2008; Popper & Lipshitz, 1998).

The creation of a learning culture depends on the strategic leader (Hurley & Hult, 1998; McGill & Slocum, 1993) and how well that leader can balance transactional and transformational behaviors, authoritarian and participative systems, and task and relationship orientations (Schein, 1992). In this study, it was found that leaders use a combination of both transformational and transactional leadership styles, in accordance to the organizational culture prevalent in the organizations, to influence the behaviours of the organizational members to contribute to organizational learning. Such interplay of leadership styles functions well in Indian organizations, in which employees generally have preference for personalized relationship, affective authority and a need for nurturance (Kavitha, 2000). The results of the qualitative study also revealed that leaders play vital role in inculcating a free and open organizational culture which allows free flow and sharing of information. Similar observation was also noted by Schein (1992) who found that leaders have a significant influence in creating and maintaining organizational culture.

(5) The impact of business strategy on the relationship between leadership and organizational learning

It is evident from the results that high Prospector and Analyzer strategies have more influence on the relationship between leadership and organizational learning as compared to those low on these strategies. Therefore, these results support Hypothesis 1E and such results were observed in earlier studies also. For example, Pedler et al. (1991) have stressed the importance of analytical approach to strategy that contribute to learning, while Senge (1990) have pointed out that future oriented strategy is critical for creation of learning organization. However, mixed result was obtained in the case of Defender strategy. Thus, it could be concluded from these results that organizational learning would be fostered in organizations whose strategies focus on innovation, seek new opportunities and is future oriented and

think ahead of contemporaries. Such organizations also try to search deeper for the root cause of problems and find the best possible solutions. They also focus on improving market position faster than its competitors. Other studies have also found that there is impact of organizational strategy on organizational learning and knowledge management (Zheng et al., 2009). The results of Study 2B also showed that proactive strategy helps the organizations to cope with the continuous changes taking place in the outside world. This in a way helps to remain competitive and sustain in the business world. Such strategy helps to envisage about the problems that are likely to come up due to various factors, such as changes taking place in the outside world, tough competition from the competitors and uncertain market. The prospector strategy also helps the organization to allocate resources for bringing out innovative and creative products ahead of their competitors. Consequently, this approach provides “competitive advantage” which gives them an edge over their competitors in the market.

However, achieving this state involves the intervention of top management because it is the top management of the organizations who envisions the goals of an organization and decides the path which should be followed by an organization to achieve its goals. It was observed in this study that in the case of Analyzer and Prospector strategies, it was Intellectual Stimulation of transformational leadership that played the important role in facilitating organizational learning because such strategies need the guidance and vision of the leaders who can stimulate the organizational members to question and think differently as such strategies are likely to promote in individuals the desire for new challenges and opportunities, along with the habit of flexibility when acquiring new learning. While in the case of Defender Strategy, it was Contingent Reward of transactional leadership which played the important roles in facilitating organizational learning. A Defender Strategy is likely to promote avoidance of risk behaviour in individuals; as such strategy is more focused on thriving in the market through their limited expertise and to provide incentives to achieve efficiency and stability in the market. Therefore, this characteristic of Defender Strategy is more in tune with Contingent Reward

behaviour of the leader and is therefore able to influence the employees to engage in activities that pertain to learning within the organization. These findings are in line with similar argument given by Nahavandi (1993).

(6) Relationship between leadership and job satisfaction and the moderating effect of organizational culture

It was found that both transformational and transactional leadership have significant positive relationship with job satisfaction. This is in line with the earlier findings (Daniels & Bailey, 1999; Gaertner, 2000; Judge & Piccolo, 2004; Yi Wu, 2009), which found that leadership behaviors related to inspiring teamwork, challenging tradition, enabling others, setting examples, and rewarding high performance have been found to have significant effects on role clarity, self-efficacy, and job satisfaction. However, there were significant negative relationships of Management-by-Exception (Passive) and Laissez-faire leadership styles with the dimensions of job satisfaction. This implies that the more frequently the top management displays both these ineffective and passive leadership styles, the employees are likely to experience less job satisfaction. This may be due to the fact that subordinates expect leaders to be more active and direct them and extend feedback in order to carry out their functions in efficient manner. Therefore, when the subordinates do not receive what they expect from their leaders, they experience less job satisfaction.

It was also observed that organizational culture moderated the impact of leadership on job satisfaction. This has been found in earlier researches also (Adkins & Caldwell, 2004; Silverthorne, 2004). Organizational culture characterized by high concern for the welfare of the employees, both personal and professional, on the part of the management and which tries to adhere steadfastly to the rules and regulations of the organization enhanced the relationship between leadership and job satisfaction.

(7) The effect of organizational learning on the relationship between leadership and job satisfaction

It is generally assumed that organizational learning have an impact on the relationship between leadership and job satisfaction as it has been observed in literature that there is usually an assumption that organizational learning leads to positive outcome. Chiva and Alegre (2009) have found a positive impact of organizational learning capability on job satisfaction. However, the result of the present study partially supported the hypothesis that there is high impact of leadership (transactional and transformational) on job satisfaction in organizations with high focus on organizational learning while the reverse will be true in organizations with low focus on organizational learning. Contingent Reward of transactional leadership played the most significant role in organizations with high focus on organizational learning as it provides role clarity and rewards the members when they perform their assigned jobs and so the members experienced satisfaction. Such transactional approach is necessary to convince people that learning, both at the individual and organizational level is beneficial at all levels (Zagorsek et al., 2009) while in organization with low focus on organizational learning, transformational leader was instrumental in providing satisfaction to the subordinates because transformational leaders, by their nature of influencing people by instilling confidence, trust and belief in the subordinates are able to provide job satisfaction to the employees, despite the less opportunity for learning, which may be present in such organizations. Further exploration and comparison of the means of the three dimensions of job satisfaction between the two categories of high and low focus on organizational learning revealed that there are significant differences in the job satisfaction among the two categories. It was also found that organizations with high focus on organizational learning have higher mean scores on all the dimensions of job satisfaction. These findings imply that though leadership did not have as much impact on job satisfaction as was expected in organizations with high focus on organizational learning as compared to those organizations low on it, still employees experience more job satisfaction in the former organizations as they get the

opportunities to interact and learn from internal sources such as from their colleagues and seniors who were more experienced than themselves as well as from external agents. This learning helps them to improve and enrich their expertise and knowledge which paves the way for their growth. This in turn contributes to the better performance of the organization. Earlier studies have also found that organization which gives priority to learning, education and development has greater profitability and increased workers' job satisfaction (Leslie et al., 1998; Mulraney & Turner, 2001).

Contributions and Implications

The aim of the present research was to strengthen the concept of organizational learning by providing a framework based on the process-oriented view of organizational learning and to establish the impact of various contextual factors, which affect its initiation, implementation and effectiveness in organizations. The present research has served the intended purpose to certain extent and following are its contributions and implications. This is divided into three parts- (1) theoretical contributions, (2) methodological contributions and (3) practical implications. These are described below-

(1) *Theoretical contribution*

It was evident from the studies conducted in this research work that organizational learning is a multi-faceted process which is practiced by different organizations to different extent. Implementing this process and practicing it depends on various factors such as leadership style, organizational culture and strategy, beside others. It was observed that a leadership style comprising of characteristics of both transactional and transformational leadership style is the most effective one. Organizational culture characterized by concern for welfare of the employees and adherence to rules and regulations play crucial role. This type of culture also encourages the employees to come out with ideas and opinions, to

adhere to the rules and regulations of the organizations and to work for the benefit of the organization by putting their maximum effort and even taking risks. There is also the influence of business strategy that is characterized by both analytic and proactive approach, on this relationship between leadership and organizational learning.

Thus, the framework proposed in this research work has been supported. This framework also lends support to some aspects of the “*multi-facet model of organizational learning*” proposed by Lipshitz et al., (2002). Organizational learning mechanisms identified in this study bear resemblance to those described by them in “*structural facet of organizational learning*”. Besides, the role of culture, i.e., the “*learning culture*” proposed by these scholars in their model has been supported in the studies reported in Chapter 3. Such culture comprises of characteristics such as transparency, accountability, trust, openness, accessibility of the leaders, etc which were also observed from the responses of the top bosses in the qualitative study. Hence, the present research provides further credence to the concept of organizational learning and shows that organizational learning needs to be treated in terms of processes. Thus, it offers some important points to dissolve some of the ambiguities surrounding the concept of organizational learning.

(2) Methodological contribution

It is worth mentioning that an off-shoot of this research work is the development of a scale for measuring organizational learning. Though, it was not the main purpose of the present research, however, the non-accessibility to standard complete tool for measuring organizational learning during the initial period of commencement of this research work compelled the researcher to develop the questionnaire based on the dimensions of Mehra and Dhawan (2003). Factor analysis of this scale yielded four dimensions reported in Study 1 (essential processes of organizational learning, interaction, flexibility and innovativeness). The reliability coefficients were satisfactory. Interestingly, this scale has shown consistent

reliability in subsequent use of this scale for project works by the under-graduate students, enrolled in the Organizational Behaviour course, in the institute where the researcher works as a Ph D scholar.

It is also important to note that there are very few studies which have employed the qualitative method (for e.g., Lipshitz & Popper, 2000) in order to explore the concept of organizational learning and its correlates. Therefore, Study 2B is a contribution to the limited number of such qualitative studies. Moreover, this method has its own value as it helps to explore a concept in-depth and to obtain detailed descriptions and views on the concerned topic (Creswell, 1998).

(3) *Practical implication*

This research work has tried to highlight the crucial role that different styles or combination of the different styles of leadership plays in creating a conducive culture which will foster organizational learning. Both transformational and transactional leadership have their role to play in fostering organizational learning. Therefore, top management of organizations should have the knack to understand the need of the hour and the situation and try to use the different leadership styles. For example, Contingent Reward leadership behaviour should be used when there is a need for a clear picture about the requirements of the job. Such leader is effective as she/he rewards the employees in exchange for satisfactorily carrying out the assignment and further motivates the subordinates to engage in activities which will contribute to their growth as well as of the organization. Moreover, it helps to establish a relation between the leaders and the followers, which is based on trust, dependability, and perceptions of consistency of leader's behaviour (Avolio & Bass, 1991). Moreover, transformational leader initiates and leads the subordinates, by providing them role models and by making the subordinates realize that they can grow by developing better job skills, positive work values and work commitment. This, in a way would contribute to maintaining a congenial culture in the organization which will foster the members to be more open, accountable and

trustworthy. It also provides the ideal condition that facilitates more sharing of knowledge and experience and more open interaction among the organizational members. Therefore, managers should take all these aspects into consideration in order to foster organizational learning in the organization.

However, Laissez-faire and Management-by-Exception leadership styles termed as “passive/corrective leadership” (Avolio et al., 1999; Den Hartog et al., 1997) are passive and neither is there an attempt to motivate the followers nor timely response to their needs. The leader intervenes only when things have gone wrong. These leadership styles may not be the appropriate way to lead organizational members because these types of behaviours are “highly dissatisfying” (Avolio, 1999) for the employees working under them. Therefore, top management in organizations should be wary of these styles and try to avoid using these styles to the extent it is possible.

In this endeavour of instituting organizational learning in organizations, business strategy also plays a critical role as the strategy adopted by the top management decides what type of organizational learning will be fostered in the organization. It was evident from this research work that organizational learning would be fostered in organizations whose strategies focus on innovation, seek new opportunities and is future oriented and think ahead of contemporaries. Such organizations also try to search deeper for the root cause of problems and find the best possible solutions. They also focus on improving market position faster than its competitors.

Moreover, the findings of this research work provide enough indication that organizational learning really works in Indian public sector organizations and it has been proved by using the multiple methodologies (survey method as well as interview) as adopted in this research work.

Limitations

As doctoral dissertations are not without some limitations; there is no exception in present case too. Following are some of the limitations of the present research work -

1. The sample of Study 2A and 2B are basically from public sector, except for two organizations from the private sector. Therefore, limited generalization can be drawn from this study for other type of organizations.
2. A general limitation of such study is the use of self reporting method. Therefore, there are chances that the respondents may be affected by the social desirability factor.
3. The sample size of Study 2B, which consisted of top management, is quite small (N = 29) as it is not easy to get the top bosses to spare time for interviews, especially for academic purposes. Though the number of top bosses taken for the present study was representative of the sample identified for the present research, however it would be better to increase the sample size in order to increase the power of generalization.
4. In order to study the impact of organizational learning on the performance of the organization, the present research used indirect measure, that is, job satisfaction. This is not a direct measure of organizational performance as compared to objective measure such as, financial performance. Though such objective measure is considered the “bottom line” indicator of performance (Cascio, 2007), however, questions have been raised regarding the “accuracy of the accounting protocols used to create financial data in the wake of corporate scandals such as Enron” (Guest et al., 2003). Therefore, it is more practical to use both subjective as well as objective measure of performance as has been used by Milia and Kamal (2009).

5. In the case of the qualitative study, one of its limitations is the use of individual interview data to infer organizational level phenomena.
6. Another limitation of the qualitative study is generalization of findings from few cases (Lipshitz & Popper, 2000). But, this problem is resolved by the fact that this study has basically tried to substantiate the findings of the quantitative study and both studies were conducted on same conceptual line and addressing similar unanswered questions that resulted from the review of literature on organizational learning.

Direction for Future Research

1. It is quite difficult to empirically establish direct causal relationship between organizational learning and organizational outcome, especially financial performance. This may be due to the fact that the financial performance of an organization is determined by many factors such as availability and quality of resources, in terms of both, material and human resources, the management style of the leaders at the helm of affairs of the organization, the business strategy adopted by the top management, the economic environment, etc. Though some researches (Ellinger et al., 2002; Bhatnagar, 2006; Milia & Birdi, 2009) have found link between organizational learning and financial performance, but more studies are required which should explore the various aspects that contribute to it along with the role of organizational learning.
2. Since it takes a relatively long duration to finally bear tangible results of organizational learning, longitudinal studies should be conducted in order to assess the impact of organizational learning on the performance of the organization.

3. Future studies should use the framework propagated in this research and conduct study in the IT sector, as it is a knowledge-intensive sector. Moreover, in this sector, organizations have to face continuous influx of new technology, volatile market, etc. Therefore, they have to continuously adapt themselves; hence there is higher need to focus on organizational learning.
4. The present study focused on organizational learning mechanisms in order to explore the processes and mechanisms used by organizations. However, future research should focus on organizational learning capability because the capacity to learn has also been considered as an important means for the effective functioning of an organization and its potential for growth (Jerez-Gomez, Cespedes-Lorente & Valle-Cabrere, 2005). Therefore, future research should use the model presented in this research but adopt organizational learning capability along with organizational learning mechanisms and study the dynamics of the relationship with the various contextual variables and finally their outcome.
5. In this research work, learning is basically seen at the organizational level. However, there are evidences that learning takes place at various levels – individual, group/team and organizational levels (Birdi, Patterson & Wood, 2007; Crossan et al., 1999; Hannah & Lester, 2009) and contribute to the overall performance of the organization. Some theoretical propositions have been propounded by Crossan et al. (1999) and Hannah and Lester (2009) in this area while few empirical studies have been conducted, such as Birdi et al. (2007), Milia and Birdi (2009), etc. However, there is a need to conduct more empirical research in this direction as it might provide a wealth of information regarding the dynamics for learning at various levels in the organizations and its impact on the success of the organization.
6. It has been observed from the review of literature that different types of strategies affect the organizational learning process and this learning process,

in consequence, affect the adoption of certain types of strategies, that is, this relationship is bi-directional (Fiol & Lyles, 1985). In the present research, only the impact of strategy on organizational learning has been studied. Therefore, future research can explore the bi-directional relationship between these two variables.

Finally, it can be concluded from this research work that organizational learning is a multi-faceted process which is practiced by different organizations to different extent. Implementing this concept and practicing it fruitfully depends on various factors such as leadership style, organizational culture and strategy, beside others. All these factors have an impact on the success of the organization. The present work will add valuable contribution in the area of organizational learning, apart from having practical implications for managers. At the same time, anyone interested in this topic may find this work useful.

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Appendix A

(Study 2A)

SET I

Indian Institute of Technology Guwahati

Department of Humanities & Social Sciences

Guwahati - 781 039 (Assam) **INDIA**

Dear Sir/Madam,

I'm a research scholar working at the Department of Humanities & Social Sciences, Indian Institute of Technology Guwahati under the guidance of Dr. Nachiketa Tripathi, Associate Professor. The area of my research is organizational learning. I would request you to kindly participate in this study and go through the following pages to answer certain questions on organizational learning, leadership, organizational culture and job satisfaction.

There is no right and wrong answer. Your answer is the best answer. Therefore, please feel free to indicate your own choice. All the information provided by the participants will be kept confidential. Moreover, we will not be focusing on individual data rather we are interested in the collective data for analysis. At no stage, we will disclose the identity of the organization or people. This research is purely for academic purpose. However, we would be happy to provide analyzed result of your organization, if you require.

As you would realize that without the help of the organizations, it would not be possible for me to carry out this research work. We understand your time constraints; at the same time, sparing few minutes for this research work will go a long way in helping the advancement of knowledge in management field. Therefore, I request you to kindly extend your cooperation.

Thanking you in advance.

Yours sincerely,

Sonia Nongmaithem

Research Scholar

E-mail: sonia@iitg.ernet.in

Personal Information

Name (Optional): _____ Age: _____ (in years)

Gender: _____ (M/F) Designation: _____

Qualifications: _____

Tenure in the present job: _____ (in years)

Total work experience: _____ (in years)

Present Salary: Please indicate your choice by putting [✓]

[] Rs.10,000-15,000

[] Rs.25,001-30,000

[] Rs.15,001-20,000

[] Rs.30,001-35,000

[] Rs.20,001-25,000

[] Rs.35,001 and above

Section I

ORGANIZATIONAL LEARNING

The following statements refer to the activities that occur in an organization. Please rate them to the extent these are applicable in your organizations using a 9-point scale given below.

1	2	3	4	5	6	7	8	9
Strongly Disagree	Disagree	Moderately Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Moderately Agree	Agree	Strongly Agree

- ___ 1. Each project/assignment taken up in our organization has up-to-date directions and follow-up procedures on file.
- ___ 2. There is a computerized filing system within the organization.
- ___ 3. There is an efficient system for gathering and analyzing professional and business information.
- ___ 4. Every new employee/manager who joins our organization receives a document summarizing the previous employee's/manager's work.
- ___ 5. The organization insists on putting procedures in writing.
- ___ 6. Every new/arriving manager is allotted a scheduled time to learn about his/her functions from the departing manager.
- ___ 7. There are follow-up procedures upon completion of tasks.
- ___ 8. Think tanks are utilized in various areas.
- ___ 9. Information is continually provided concerning the various tasks within the organization.
- ___ 10. The organization initiates meetings among its employees after working hours.
- ___ 11. A report is written upon completion of each task.
- ___ 12. Every employee knows that he/she has the responsibility to gather relevant information from outside the organization.
- ___ 13. In spite of the division of the organization into various units, mobility of employees exists within the organization according to need.
- ___ 14. There are on-going investigative procedures for checking causes of mishaps and failures.
- ___ 15. Trainers are assigned to instruct new employees.
- ___ 16. There are archives where data, procedures, performance reports and the like are on file and may be retrieved at any time.
- ___ 17. There are on-going investigative procedures for analyzing successes.
- ___ 18. The organization is involved in joint ventures/undertakings with other organizations in the areas of development or production.
- ___ 19. Control and performance evaluation are built into each project's plan (professional or managerial).
- ___ 20. Information is continually provided about the fields of expertise of various individuals within the organization.
- ___ 21. Business or professional plans are modified according to on-going feedback.
- ___ 22. Significant resources (time, money, personnel) are allocated for learning.

1	2	3	4	5	6	7	8	9
Strongly Disagree	Disagree	Moderately Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Moderately Agree	Agree	Strongly Agree

- ___23. Departments in our organization have formalized relationships similar to the supplier–customer relationship.
- ___24. Individuals/teams are able to receive performance evaluation reports immediately from the boss.
- ___25. Analysis of failures and successes is followed by modification of procedures, instructions and work methods.
- ___26. The reward system encourages participation. For instance, bonuses are given for successful teamwork.
- ___27. Employees share information willingly with one another.
- ___28. Individuals do not hesitate to ask for assistance when a problem arises.
- ___29. Willingness to help and to share information is used as a criterion for evaluation.
- ___30. The organization nurtures and uses knowledgeable employees as authorities in certain managerial and professional fields (“Champions”).
- ___31. There are regular team/department meetings for the purpose of ongoing reports and discussions.
- ___32. There is a procedure for rotation of roles/occupations.
- ___33. There are updating and coordinating meetings among various teams.
- ___34. Supply of information and professional support among the various departments are integral parts of our organization.
- ___35. Individual training programs are standard practice.
- ___36. Group training programs are standard practice (courses, seminars, lectures).
- ___37. External consultants are invited for giving consultancy in certain areas where the organization lacks expertise.
- ___38. Employees are sent to external professional development programs.
- ___39. There is a regular supply of professional and managerial literature.
- ___40. The performance of other organizations is used as a benchmark for evaluation and learning.
- ___41. Funds are set aside for the professional development of individual employees.
- ___42. Information is indexed by categories for easy retrieval.
- ___43. There are professional linkages with other organizations.
- ___44. The organization is involved in joint ventures/undertakings in business matters.
- ___45. Team meetings regularly include reports detailing advances in the relevant professional and business information.
- ___46. There is a simple way to retrieve information on any relevant subject.
- ___47. The systems and practices in our organization have led to better performance and success of the organization.

___48. The systems and mechanisms of our organization have helped the organizational members to improve their performance.

Section II

MLQ - MULTIFACTOR LEADERSHIP QUESTIONNAIRE©

Name of Leader: _____ Date: _____

This questionnaire is to describe the leadership style of the above-mentioned individual, as you perceive it. Your point of reference should be the person with whom you have direct reporting relationship. Please answer all items on this answer sheet. **If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.** Please answer this questionnaire anonymously.

IMPORTANT (necessary for processing): Which best describes you?

- ___ I am at a higher organizational level than the person I am rating.
- ___ The person I am rating is at my organizational level.
- ___ I am at a lower organizational level than the person I am rating.
- ___ I do not wish my organizational level to be known.

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits the person you are describing. Use the following rating scale and for indicating your choice please **encircle** the appropriate number [For example, 2]

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
1	2	3	4	5

The person I am rating.....

1. Provides me with assistance in exchange for my efforts	1	2	3	4	5
2. Re-examines critical assumptions to question whether they are appropriate	1	2	3	4	5
3. Fails to interfere until problems become serious	1	2	3	4	5
4. Talks enthusiastically about what needs to be accomplished	1	2	3	4	5
5. Treats me as an individual rather than just as a member of a group	1	2	3	4	5

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Section III

ORGANIZATIONAL CULTURE©

The following statements describe the practices carried out in organizations. Please rate them to the extent these are applicable in your organizations using 5-point bipolar scale. (Bipolar scale is explained below.)

1. Bipolar opposites

The following list contains two opposite descriptions on each line. For example:

Where I work everybody always
smokes

1 2 3 4 5

Where I work nobody ever smokes

If it is true that everybody always smokes where you work, please circle 1. If nobody ever smokes, please circle 5. If the truth is in between, choose 2, 4, or 3, depending on whether the truth is closer to 1, to 5, or just in between. (please, always **CIRCLE** one answer for each line across)

Where I work....

- | | | |
|--|------------------|---|
| 1. People are uncomfortable in unfamiliar situations; they try to avoid taking risks | 1 2 3 4 5 | People are comfortable in unfamiliar situations; they do not mind taking risks |
| 2. People spend the least effort possible | 1 2 3 4 5 | Everybody always puts in a maximal effort |
| 3. Each day brings new challenges | 1 2 3 4 5 | Each day is pretty much the same |
| 4. There is a strong pressure for getting the job done; there is little concern for personal problems of employees | 1 2 3 4 5 | Personal problems of employees are always taken into account; getting the job done comes second |
| 6. Our company/organization takes a major responsibility for the welfare of its employees and their families | 1 2 3 4 5 | Our company/organization is only interested in the work our employees do |
| 8. People's private lives are considered their own business | 1 2 3 4 5 | The norms of our organization cover people's behavior, both on the job and at home |
| 10. Our organization and people are open and transparent to newcomers and outsiders | 1 2 3 4 5 | Our organization and people are closed and secretive, even among insiders |
| 11. New employees usually need more than a year before they feel at home | 1 2 3 4 5 | New employees usually need only a few days to feel at home |
| 15. The major emphasis is on meeting the needs of the customer | 1 2 3 4 5 | The major emphasis is on correctly following organizational procedures |

16. Correct procedures are more important than results	1	2	3	4	5	Results are more important than following correct procedures
17. We have high standards of business ethics and honesty, even at the expense of short-term results	1	2	3	4	5	In matters of business ethics, we are pragmatic, not dogmatic
21. We always supply the same well-tested products and services	1	2	3	4	5	We try to be pioneers in developing new products and services
22. Cooperation and trust between departments are normal	1	2	3	4	5	Competition and mistrust between departments are frequent
29. Top managers resent being contradicted	1	2	3	4	5	Top managers want to hear people's opinions, even if different from theirs
47. Decision making is centralized at the top of the hierarchy	1	2	3	4	5	Decisions are made by the most expert or best informed people, wherever they are placed in the hierarchy
51. We always dress formally and correctly	1	2	3	4	5	We often dress informally and casually
53. Management is stingy about small things that would make the employees' lives pleasant	1	2	3	4	5	Management is generous with small things that make the employees' lives more pleasant
54. Almost anyone would fit into our organization	1	2	3	4	5	Only very special people fit into our organization

Semantic differentials

How would you describe the behavior of a typical member of your organization? (Please CIRCLE one in each line across)

60. Well-groomed 1 2 3 4 5 Sloppy

Section IV**JOB SATISFACTION**

Please indicate how satisfied you are on a 7- point scale with each of the following aspects of your job, read each item carefully and put the number of your choice on the small line to the left of each item.

Very dissatisfied	.....	7	Slightly satisfied	.....	3
Dissatisfied	.....	6	Satisfied	.....	2
Slightly dissatisfied	.....	5	Very satisfied	.....	1
Neutral	.....	4			

How satisfied are you with:

- ___ (1) The fringe benefits you receive.
- ___ (2) The friendliness of the people you work with.
- ___ (3) The amount of freedom you have on your job.
- ___ (4) The chances you have to learn new things.
- ___ (5) The respect you receive from the people you work with.
- ___ (6) The chances you have to accomplish something worthwhile.
- ___ (7) The amount of pay you get.
- ___ (8) The chances you have to do something that makes you feel good about yourself as person.
- ___ (9) The way you are treated by the people you work with.
- ___ (10) The chances you have to take part in making decisions.
- ___ (11) The amount of job security you have.

Thank you once again for sparing your valuable time!

Indian Institute of Technology Guwahati
Department of Humanities & Social Sciences
 Guwahati - 781 039 (Assam), **INDIA**

Dear Sir/Madam,

I'm a research scholar working at the Department of Humanities & Social Sciences, Indian Institute of Technology Guwahati under the guidance of Dr. Nachiketa Tripathi, Associate Professor. The area of my research is organizational learning.

In order to carry out this work, I need to collect data from top bosses of different organizations. You will be required to give responses to a set of questionnaires, which comprise of measures of leadership and strategy. This entire exercise takes around 10-15 minutes. Also, we would like to interview you on issues related to organizational learning, leadership, organizational culture and strategy. The duration for the interview would be around 15-20 minutes.

There is no right and wrong answer. Your answer is the best answer. Therefore, please feel free to indicate your own choice. All the information provided by you will be kept confidential. At no stage, we will disclose the identity of the organization or people. This research is purely for academic purpose. However, we would be happy to provide analyzed result of your organization, if you require.

As you would realize that without the help of the organizations, it would not be possible for me to carry out this research work. We understand your time constraints; at the same time, sparing few minutes for this research work will go a long way in helping the advancement of knowledge in management field. Therefore, I request you to kindly extend your cooperation.

Thanking you in advance.

Yours sincerely,

Sonia Nongmaithem
Research Scholar
 E-mail: sonia@iitg.ernet.in

Personal Information

Name (Optional): _____ Age _____ (in years)

Gender _____ (M/F) Designation _____

Qualifications _____

Tenure in the present job _____ (in years)

Total work experience _____ (in years)

Present Salary: Please indicate your choice by putting [✓]

[] Rs.20,000-25,000

[] Rs.35,001-40,000

[] Rs.25,001-30,000

[] Rs.40,001-45,000

[] Rs.30,001-35,000

[] Rs.45,001 and above

Section I

STRATEGY

All questions pertain to the strategic orientation, exclusively, of your organization. Please answer the following questions on a 7-point scale given below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

- ___ 1. As decision makers, we believe in sacrificing profitability to gain market share
- ___ 2. We keep formal track of significant general trends.
- ___ 3. We make timely significant modifications to the manufacturing technology
4. In making strategic decisions, we believe in cutting prices to increase market share.
- ___ 5. We have a tendency to support projects where the expected returns are certain.
- ___ 6. We tend to forecast key indicators of operations.
- ___ 7. When situation arises, we set prices below competition.
- ___ 8. Operations in larger stages of life cycle are strategically eliminated.
- ___ 9. Sometimes, we seek market share position at the expense of cash flow and profitability.
- ___ 10. We usually conduct "What-if" analysis of critical issues.
- ___ 11. The operations that are carried out in our organization can be generally characterized as high-risk.
- ___ 12. The information systems in our organization provide support for decision making.
- ___ 13. We use planning techniques while framing strategic plans.
- ___ 14. We practice manpower planning and performance appraisal of senior managers.
- ___ 15. We use cost control systems for monitoring performance.
- ___ 16. We use production management techniques.
- ___ 17. We emphasize basic research to provide us with future competitive edge.
- ___ 18. We lay due emphasis on product quality through the use of quality circles.
- ___ 19. We are constantly on the look out for business that can be acquired.
- ___ 20. Our criteria for resource allocation generally reflect short-term considerations.
- ___ 21. We constantly seek new opportunities related to the present operations.
- ___ 22. We use the outputs generated from management information and control systems while taking strategic decisions
- ___ 23. In making strategic decisions, we constantly seek to introduce new brands or products in the market.
- ___ 24. We emphasize effective coordination among different functional areas.
- ___ 25. Competitors generally preempt us by expanding capacity ahead of them.
- ___ 26. We seem to adopt a rather conservative view when making major decisions.
- ___ 27. When confronted with a major decision, we usually try to develop through analysis.
- ___ 28. We approve new projects on a "stage-by-stage" basis rather than "blanket" approval.
- ___ 29. Operations carried out by us have generally followed the "tried and true" paths.

Appendix B
(Study 2B)

Interview Schedule (Organizational Learning)

1. Please let us know about yourself and the nature of the duties you perform in this organization.
2. How many employees work under you?
3. Do you think that expertise of individuals and the solutions of the problems, which they discover can be transferred to other members in the organizational set-up?
4. Can you please specify the mechanisms which you and/or your organization has initiated which facilitates sharing of knowledge and “ways of solving problems” among the work groups?
5. During the interactions/meetings, is there some emphasis on foreseeing the probable problems and their solutions?
6. There are five stages of information processing, namely, (1) collecting, (2) analyzing, (3) drawing lesson learned, (4) disseminating and (5) putting to use. Which are the departments in your organization that can be associated with these different stages of information processing?
7. How does your organization try to achieve the above goals? To be precise, what steps do you take to achieve them?
8. Do you think that such processes result in the profitability of the organization?
9. To create the conditions which would foster sharing of information/ knowledge and learning among employees, in your opinion, what are the practices and norms, which must prevail in the organization? In other words, what are the antecedent conditions which are needed for this purpose?
10. What kind of roles can the leaders/top management play in order to create such conducive conditions for the organizational members to learn and share information/ knowledge?
11. In your view, what kinds of strategies foster the learning processes we have discussed above?
12. One final question, do you think your organization is learning and creating knowledge base, which would help innovation and creativity in future?

Appendix C

Organization 1

This is a logistics company which provides inland transport for containers and goods by rail; it has also expanded to cover management of Ports, air cargo complexes and establishing cold-chain. The company developed multimodal logistics support for India's International and Domestic containerization and trade. The company commenced operations on November 1, 1989, by taking over seven Inland Container Depots from the Indian Railways located at Delhi, Ludhiana, Bangalore, Coimbatore, Guwahati, Guntur and Anaparti. Since then, it has developed a vast network of container terminals at prime locations all over the country. At present, it has a total of 59 ICDs spread over different parts of the country.

This company is headed by a Managing director and directors of 4 divisions like international marketing and operations, finance, etc work under him. There are 8 corporate offices scattered in various parts of the country.

The domestic division of this company functions through a network of terminal/hubs. There are at present 5 exclusively domestic terminals, but as many as 20 of the other terminals on the terminal map of this organization also offer domestic services. However, most of the new terminals being introduced are now being planned as combined domestic/international terminals. The thrust of domestic operations is to run a series of point to point scheduled trains. These services form the spokes in a wider hub-spoke strategy whereby cargo is consolidated through road or even rail, at major hub terminals from where such services operate. Of total container handled at Indian Ports, this company at present moves 30%. In the last 10-11 years the performance of the company has been improving tremendously and its net profit as on September 2009 is rupees 204,35 crores.

Organization 2

This is a transportation company which provides public commutation services in and around Delhi. It was registered on May, 1995 under the Companies Act, 1956. It is a joint venture company with equity participation from Govt. of India and Govt. of National Capital Territory of Delhi has been entrusted with responsibility of implementation of the Rail Based Mass Rapid Transit System for Delhi. This company is headed by a Chairman. There is a Managing director and 16 several directors who work under him. The mission of this company is to cover the whole of Delhi by the year 2021 and be of world class standards in regard to safety, reliability, punctuality, comfort and customer satisfaction. Despite several problems during its inception period, this mass rapid transit system has fared quite well and managed to deliver services at par with international standards.

Organization 3

This organization which is a Government of India Enterprise provides comprehensive engineering, consultancy and project management services in the transport infrastructure sector under single roof. Since its inception in 1974, company has made steady progress and diversified into new areas of business such as, export/leasing, maintenance and rehabilitation of railway rolling stock, operation and maintenance of railway systems. It provides a comprehensive array of services under a single roof and believes in transfer of technology to client organizations. In overseas projects, it actively pursues and develops cooperative links with local consultants / firms, as means of maximum utilization of local resources and as an effective instrument of sharing its expertise. It is internationally recognized as a leading consultant with operational experience of 62 countries in Africa, South East Asia, Middle East and Latin America. Most of RITES foreign assignments are for National Governments and other apex organizations.

This organization is headed by a Chairman under whom there is a managing director and various other directors of divisions like finance, projects, technical, etc. This organization employs over 2000 staff including over 1200 specialists of high professional standing in the fields of engineering, management and planning. Its annual turnover has been increasing over the years and its annual turnover for the year 2008-2009 is Rs. 672 crores.

Organization 4

This is leading construction company incorporated by the Central Government (Ministry of Railways) under the Companies Act, 1956 on 28th April, 1976. It is a public sector company known for its quality, commitment and consistency in terms of Performance. It is a specialized constructions organization covering the entire spectrum of construction activities and services in the infrastructure area.

It operates not only in a highly competitive field but also in difficult terrains and regions in India and abroad and is an active participant in prestigious nation building projects. It has so far completed more than 270 infrastructure projects in India and more than 90 projects across the globe in more than 20 countries. IRCON has widespread operations in several States in India and in other countries (Malaysia, Nepal, Bangladesh, Mozambique, Ethiopia, Afghanistan, U.K. Algeria & Sri Lanka Now). The company has been performing well over a period of years and its total income (inclusive of other income) for the year 2007-2008 is Rs. 20931.12 millions.

Organization 5

This organization is a Public Sector Unit (PSU) under the Ministry of Railways, Government of India and was formed in September 2000. The corporation aims to create a nationwide broadband telecom and multimedia network in all parts of the

country. As far as infrastructure goes, it has created the state-of-the-art multimedia telecom network using SDH/DWDM-based transmission systems and high-end routers for MPLS-IP network. From an initial OFC network of less than 5000 KM transferred to it in the year 2000-01, it has since expanded the network to over 34000Km by 2008-09. One of the major achievements for the company recently was creating initial phase of National Knowledge Network under the guidance of NKC and NIC. It has also provided the highest number of links in the pilot phase and has also entered into strategic tie ups with new Telcos to provide them BW and NLD support in their faster roll outs.

The company's regional divisions are headed by managing director and assisted by four directors and several Joint GMs, Assistant GMs, etc. The performance of the company is improving over the period. During the financial year 2007-08, RailTel has received revenue receipts of Rs. 213.92 crores which is 74.63% higher than the revenue receipt of Rs. 122.5 crores for the financial year 2006-07. The operating profit earned during the year is Rs. 117.85 crores before interest, depreciation and tax as against that of Rs. 62.57 crores in the preceding year. After providing for interest and depreciation, the net profit before tax amounted to Rs. 56.43 crores.

Organization 6

It has been set up by the Ministry of Railways with the basic purpose of entrusting the entire catering and tourism activity and online ticketing operations of the railways to the new corporation so as to professionalize and upgrade these services with public-private participation. It is in charge of catering services on trains and railway stations across India. It is also better known for changing the face of railway ticketing in India. It pioneered Internet-based rail ticket booking through its website, as well as from mobile phones via GPRS or SMS. Ticket cancellations or modifications can also be done online. It also organizes budget and deluxe package tours for domestic and foreign tourists.

The organization is headed by managing director and assisted by four directors and several Group GMs, Joint GMs, Assistant GMs, etc. It employs large number of people. The organization has been functioning well and there has been sizeable increase in net income from year 2005-06 to 2006-2007, that is total income of Rs.167.98 crore in the first case while it was Rs.433.54 crores in the latter case. During the year 2008-09, the organization achieved a total income of Rs. 618.77 crore as compared to Rs.527.66 crore in 2007-08 thereby registering a growth of 17.3 %.

Organization 7

This company is India's highly progressive research based health management company involved in research, manufacturing and marketing of branded pharmaceutical formulations, vaccines and natural products. The product portfolio includes highly innovative prescription products in important therapeutic areas like pain management, diabetes & cardiovascular management, renal disease management, osteoporosis management, anti-tubercular, gastro-intestinal care products and vaccines.

Ardent Research and Development efforts have always been a great strength of this company. The company has developed four distinguished, ultra modern, state-of-art R&D centers in different locations, having internal capabilities for constant research, with over 200 highly professional and skilled scientists engaged in various aspects of research. Focused research efforts have led to grant of worldwide product patents valid in over 60 countries for this company. As on March, 2007, the company had filed 490 patent applications in various parts of the world including India. Of these, 163 have been granted patent and others are under various stages of examination or publication by the patent authorities. The management comprises of a team of board of directors have hands on experience in Drug Development including risk assessment, corporate collaborations, clinical program management, regulatory affairs, Finance Management, successful product commercialization and

customer relationship management. The net turnover of this company in the year 2008-2009 is Rs. 7,734 millions.

Organization 8

This factory was commissioned in the year 1984 to produce wheels as well as axles for the Indian Railways. It is a state-of-the-art plant, meeting bulk of the requirement of wheels, axles and wheel sets for the Indian Railways. The spare capacity available is profitably utilized to meet the domestic demands for non-railway customers and exports. The plant is certified to ISO-9001: 2000 and ISO-14001: 1994 standards by M/s. BVQI. It is also certified to conform to the Quality Assurance Program of Association of American Railroads (AAR) in respect of manufacture of new wheels and axles. It has the full capability to design and manufacture any size of wheels, axles and wheel sets to suit individual customer's special requirements. The mission of this organization is to emerge as a unique global centre for design, development and manufacturing excellence of our products through continuous improvement by upgrading our quality, reliability, dependability and value addition in a deliberate and proactive manner.

The company is headed by a General Manager and he is assisted by Chief Personnel officer and various senior and assistant officers. This production unit has more than 2000 of employees and the annual turnover of this unit is about Rs. 82 crores.

Organization 9

In July 1969, this organization nationalized and is now a Public Sector organization constituted under the Banking Companies (Acquisition & Transfer of Undertakings) Act, 1970. Some milestones of this organization are that it is one

among six Public Sector Banks selected by the World Bank for sanctioning a loan of Rs.72.3 crores for augmentation of Tier-II Capital under Financial Sector Developmental project in the year 1995. It is also one among the few Banks to receive the World Bank loan for technological upgradation and training.

Its aim is to provide its customers premier financial services of great value, to create positive work environment and opportunity for growth and achievement for its employees, superior financial returns for its shareholders and economic growth for the community.

This organization functions through Board of Director which is headed by Chairman (Managing Director) and next in the hierarchy is the Executive Director. There are several General Managers and other officers which contribute to the smooth functioning of the organization. This organization has several branches in different parts of the country. The total net income of this organization for the year 2009 (March) is Rs. 315402 lakhs and its net profit is Rs. 35979 lakhs.

Organization 10

It was originally promoted in 1994 by an Indian financial institution, and was its wholly-owned subsidiary. It was formed in 1955 at the initiative of the World Bank, the Government of India and representatives of Indian industry. The principal objective was to create a development financial institution for providing medium-term and long-term project financing to Indian businesses. In 1999, it became the first Indian company and the first bank or financial institution from non-Japan Asia to be listed on the NYSE.

It is India's second-largest bank. It has a network of 1,527 branches and about 4,816 ATMs in India and presence in 18 countries. It offers a wide range of banking products and financial services to corporate and retail customers through a variety of

delivery channels and through its specialised subsidiaries and affiliates in the areas of investment banking, life and non-life insurance, venture capital and asset management. It currently has subsidiaries in the United Kingdom, Russia and Canada, branches in United States, Singapore, Bahrain, Hong Kong, Sri Lanka, Qatar and Dubai International Finance Centre and representative offices in United Arab Emirates, China, South Africa, Bangladesh, Thailand, Malaysia and Indonesia.

Its total assets is Rs. 3,674.19 billion (US\$ 77 billion) at June 30, 2009 and profit after tax Rs. 8.78 billion for the quarter ended June 30, 2009. Its equity shares are listed in India on Bombay Stock Exchange and the National Stock Exchange of India Limited and its American Depository Receipts (ADRs) are listed on the New York Stock Exchange (NYSE).

Organization 11

It is a constituent Institution under the Council of Scientific and Industrial Research of India. It is a high technology oriented institution which focuses on advanced topics in the aerospace and related disciplines. It is India's only civilian aerospace laboratory with a high level of competence and the expertise of its scientists is globally acknowledged. It has some sophisticated test facilities which are the best in the country and comparable to those abroad. All these are manned by specialized teams who operate the facilities, conduct experiments, analyze the data and provide value added inputs to programmes.

It is in its 50th Year of existence and over these years has made significant contributions to a large number of aerospace programmes like (civil and military) aircraft programmes, space programme, engine development programmes, defence and strategic programmes of the country and has also contributed vital industrial and societal outputs. It has many collaborative projects with reputed international agencies. It has also developed special expertise in certain fields and has made value

added contributions to the areas like aircraft fleet maintenance, life extension, flight safety etc. It is the harbinger of civil aviation design and development activities in India.

It has successfully executed some innovative research projects in advanced topics of relevance like smart materials, parallel processing, advanced flow diagnostics, airport instrumentation etc. Its societal contributions include harnessing of solar and wind energy, streamlining vehicles for fuel economy and weather prediction systems. All these contributions have enabled it to consistently generate a substantial part of its budget through projects and be top the generator of external cash flow among CSIR laboratories.

Organization 12

The company came into existence on 1st October 1964. The Company traces its roots to the pioneering efforts of an industrialist with extraordinary vision, the late Seth Walchand Hirachand, who set it up in December 1940. The Government of India became a shareholder in March 1941 and took over the Management in 1942.

Today, it has 19 Production Units and 9 Research and Design Centres in 7 locations in India. The Company has an impressive product track record - 12 types of aircraft manufactured with in-house R & D and 14 types produced under license. It has manufactured over 3550 aircraft, 3600 engines and overhauled over 8150 aircraft and 27300 engines.

It has been successful in numerous R & D programs developed for both Defence and Civil Aviation sectors. It has made substantial progress in its current projects like, Dhruv, which is Advanced Light Helicopter (ALH), Tejas - Light Combat Aircraft (LCA), Intermediate Jet Trainer (IJT) and various military and civil upgrades.

It has also played a significant role for India's space programs by participating in the manufacture of structures for Satellite Launch Vehicles.

The company has crossed the Rs.10,000 crore mark for the first time with a sales turnover of Rs.10,373 crores during the Financial Year 2008-09. The profit of the Company (Profit Before Tax) soared to Rs.2,335 crores.

Organization 13

This company was incorporated in 1953 by the Government of India as a machine tool manufacturing company with the objective of producing machine tools required for building an industrial house for the country. It was very successful, however in 1967, recession struck the Indian engineering industry and the consumption of machine tools dipped drastically and it affected the company.

Over the years, it has diversified into watches, tractors, printing machinery, metal forming presses, die casting & plastic processing machinery & bearings. Successful technology absorption in all product groups through collaborations with world renowned manufacturers & further strengthened by continuous in-house R&D. Today, it comprises of five subsidiaries under the ambit of a holding company, which also manages the tractors business directly. Have its manufacturing units at five locations across the country with each unit specializing in a particular family of machines/services. The sales and service network is spread across the length and breadth of the country. It also has a market presence across the globe.

Organization 14

It is the first underground railway to be built in India and it started operating in 1984. It is the first metro rail service in the country. It is run by the Indian Railways and is considered to have the status of a zonal railway. It covers a route

length of 22.3 kilometers across of the city of Kolkata and has 21 stations. This organization has not performing well due to non-realization of the passenger traffic projected initially and for various other reasons.

Organization 15

This organization provides transportation facility. It was formed in April, 1952 by integration of the East Indian Railway consisting of Sealdah, Howrah, Asansol and Danapur Divisions and the entire Bengal – Nagpur Railway. The service provided by this transportation is important to the economy of the country, as apart from serving the most densely populated region in the country, this serves the area rich in minerals, agriculture and industry. It has three major workshops situated at Jamalpur, Liluah and Kanchrapara. It loads about 50 million tonnes freight in addition to carrying heavy long distant passenger and heavy local traffic. It transports coal, iron and steel products from Durgapur and Burnpur, stone from Pakur and Jamalpur, cement from Durgapur and host of other merchandise including jute, tea, textile, automobiles, agricultural produce etc., at various stations.

This organization functions under the guidelines Railway Board. The division is headed by General Manager who functions with the assistance of Additional General Manger and various senior officers and staffs.

Organizational Learning and Leadership: Moderating Effect of Organizational Culture

Abstract

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Month and Year of thesis submission	:	November, 2009

The present research attempted to answer the following research questions – (1) What are the differences in organizational learning processes across organizations? (2) What are the different leadership styles or combination of leadership styles that facilitate organizational learning? (3) What is the impact of top management leadership style on organizational learning? (4) Which kind of culture promotes learning that is beneficial to the organization? (5) What is the role of strategies in the effective implementation of organizational learning process in an organization? (6) What is the impact of all these factors on the performance of the organization?

In order to answer above-mentioned research questions, three studies were conducted. Study 1 and Study 2A were quantitative studies while Study 2B was a qualitative study. Study 2B was conducted to augment the results of Study 1 and Study 2A. It was found from the results of the three studies that – (1) there were differences in the organizational learning processes across different organizations, (2) there was positive relationship between leadership (Transformational and Transactional leadership) and organizational learning, (3) this relationship was moderated by organizational culture as well as business strategy, and (4) all these factors have positive effect on the performance of the organization. The results of Study 2B also supported the findings of the two quantitative studies.

This research work highlights the crucial role that different styles or combination of the different styles of leadership plays in creating a conducive culture

which will foster organizational learning. Top management of organizations should have the knack to understand the need of the hour and the situation and try to use the different leadership style.

