ENABLERS OF LEARNING ORGANIZATION- A CASE OF MANAGEMENT INSTITUTES IN INDIA

Ph.D. THESIS

by

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CANDIDATE'S DECLARATION

I hereby certify that the work, which is being presented in this thesis, entitled **"Enablers of learning organization - A case of management institutes in India"** in partial fulfilment of the requirements for the award of the Degree of Doctor of Philosophy and submitted in the Department of Management Studies, Indian Institute of Technology Roorkee is an authentic record of my own work carried out during a period from December, 2011 to June, 2015 under the supervision of **Dr. Usha Lenka**, Assistant Professor, Department of Management Studies, Indian Institute of Technology Roorkee, Roorkee, India.

The matter presented in this thesis has not been submitted by me for the award of any other degree of this or any other Institute.

(SANIYA CHAWLA)

This is to certify that above statement made by the candidate is correct to the best of my knowledge.

Date:

(Usha Lenka)
Supervisor

Dedicated to my grand mom (Mamma)

ABSTRACT

Present study intends to identify enablers of learning at individual, team, and organizational level to build a *learning organization.* It also investigates the role of *learning organization* in developing an employer brand. These enablers are resonant leadership, intrapreneurship, knowledge management, total quality management, and supportive learning culture.300 management institutes located in 19 states of India selected at random have been considered as a unit of analysis. 300 directors and 300 faculty members were contacted to seek their opinion on various items of survey questionnaire. The survey questionnaire has been self-designed with the help of review of relevant literature on *learning organizations.* Faculty members have responded to questions on resonant leadership, intrapreneurship, knowledge management, supportive learning culture, and employer branding. Whereas, directors have responded to questions on total quality management and *learning organizations.* Structural equation modeling using AMOS 21.0 version has been used to check validity of constructs and test the hypothesized relationships among them. Total quality management and supportive learning culture have shown positive influence on *learning organization*. Resonant leadership, intrapreneurship, and knowledge management have non-significant relationship with *learning organization.* Consequently, *learning organization* also has a non-significant relationship with employer brand. In the present study, total quality management and supportive learning culture have been found to act as enablers of learning organization. The management institutes who have participated in the survey affirmed that their emphasis is on infrastructure building. These institutes have not been able to transform as a true learning organization as they are facing several impediments such as bureaucracy, power distance, and equivocal approach of faculty members. Though, learning organization is an ideal concept practiced mostly in western organizations, but in reality transforming an educational institute as a learning organization needs to overcome barriers of power and politics, values, and norms. Therefore, the purpose of developing a holistic model of learning organization has been defeated in the current sample.

Keywords: Learning organization, total quality management, supportive learning culture, and management institutes in India.

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'Praise the lord'

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(SANIYA CHAWLA)

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LIST OF ABBREVIATIONS

Abbreviations/Symbols	*Definition*
ξ	Error term
AGFI	Adjusted goodness of fit index
AMOS	Analysis of moment structures
CFI	Comparative fit index
Cronbach's α	Cronbach's index of internal consistency
df	Degree of freedom
GFI	Goodness of fit index
H_1	Alternative hypothesis
LVSEM	Latent variable structural equation modeling
M	Mean
NFI	Normed fit index
P	Probability value
PCFI	Parsimonious comparative fit index
PGFI	Parsimonious goodness of fit index
PNFI	Parsimonious normed fit index
RMSEA	Root mean square of approximation
SD	Standard deviation
SEM	Structural equation modeling
SPSS	Statistical package for social sciences
χ^2	Computed value of chi square test

CHAPTER 1

INTRODUCTION

Business environment in India has become complex and dynamic to continue with existing strategies and practices. Such an environment with ever-increasing demand of customers has forced organizations to continuously learn, adapt, and change. No industry including educational institutes is left untouched by global competitive pressure. The aspiring higher educational institutes are vying for global competitive ranking. Though, increased competition will expand more opportunities, but individual faculty members, students, and academic staff has to develop his/her capability to catch up with competition. Rather than expanding their capacity, the higher educational institutes need to emphasize on overall development. Thus, the competition of the millennium calls for organizational learning, a pre condition for developing a learning organization. Learning organization is an ideal organization perceived by western management practitioners that rests on five pillars of personal mastery, mental models, shared vision, team learning, and systems thinking (Senge, 1990). These pillars of learning help an organization sustain emerging challenges of contextual environment and stay ahead of the competitors. Both manufacturing and service organizations are embracing the pillars of learning to transform as learning organizations. This concept is building momentum even in educational institutes to withstand competition posed by mushrooming growth in the sector. Thus, there is a strong need for the educational institutes to become learning organizations.

1.1 Statement of Problem

India is known for its highly skilled and educated workforce and has transformed its higher education sector. The country is recognized to be single largest provider of global talent and is presently in a development stage of becoming a hub of higher education. Indian higher education represents third largest in the world, next to USA and China (Choudaha, 2013). Today there are more than 35000 affiliated colleges and 700-degree granting institutes in the country enrolling more than 20 million students every year (Table 1.1, Table 1.2, and Table 1.3). Table 1.1 shows that a large number of institutes offering higher education are in the private sector as per year 2013-2014. Table 1.2 shows decline in enrollment of students in higher educational institutes as per year 2013-2014. Table 1.3 shows 37% of enrollment in arts, 19% in science, 18% in management, and 16% in engineering and technology as per year 2013-2014.

Table 1.1: *Higher Educational Institutes in India for the Year 2013-2014*

Type of Institute	*Number*
Central Universities (Public)	44
State Universities (Public)	306
State Universities (Private)	154
Deemed Universities (Public/Private)	129
Institution of National Importance (Public)	67
Total Degree-granting Institutions	700
Affiliated Colleges (Public/Private)	35,539

(Source: UGC)

Table 1.2: *Enrollment of Indian Students in Respective Courses for the Year 2013-2014*

Field	*Number ('000)*	*%*
Graduate (Bachelor's)	17,456	86%
Post-Graduate (Master's)	2492	12%
Research (Doctoral)	161	1%
Diploma/Certificate	218	1%
Total	20,327	100%

(Source: UGC)

Table 1.3: *Enrollment of Indian Students in Various Disciplines for the Year 2013-2014*

Field	*Number ('000)*	*%*
Arts	7539	37%
Science	3790	19%
Commerce and Management	3571	18%
Engineering and Technology	3262	16%
Education	733	4%
Medicine	716	4%
Law	373	2%
Others	218	1%
Agriculture	97	0%
Veterinary Science	28	0%

Total	20,327	100%

(Source: UGC)

Though, the last few years, India has witnessed a significant increase in the number of higher educational institutes and student output, making it a complex and a large system. However, management programmes across the country are losing some of their scintillation. All India Council for Technical Education (AICTE) shows 147 stand alone B-schools and MBA programmes offered by various engineering institutes across the country closed down in the academic year 2014-2015 (Ramya, 2015) (Table 1.4).

Table 1.4: *Number of MBA Institutes on the Decline for the Year 2014-2015*

State	*2013-2014*	*2014-2015*	*No. of institutes closed*
Maharashtra	406	382	-24
Tamil Nadu	395	372	-23
Andhra Pradesh	851	832	-19
Uttar Pradesh	447	431	-16
Haryana	150	135	-15
Karnataka	209	198	-11
Rajasthan	110	99	-11
Gujarat	108	100	-8
Uttarakhand	49	43	-6
Madhya Pradesh	203	198	-5
West Bengal	55	51	-4
Punjab	129	127	-2
Odhisa	72	70	-2
Himachal Pradesh	15	13	-2
J & K	11	9	-2
Chhattisgarh	20	20	0
Delhi	18	18	0
Assam	9	9	0
Puducherry	6	6	0
Meghalaya	1	1	0
Nagaland	1	1	0
Sikkim	1	1	0
D & N Haveli	1	1	0
Kerala	73	74	1
Bihar	18	19	1
Jharkhand	6	7	1
Total	3364	3217	-147

(Source: Times of India, 2015)

Therefore, there is a need to overhaul the scenario of institutes offering management degrees. There are various problems faced by them in terms of lack of uniformity in the curriculum and indiscriminate admission policies. As a result, the institutes are not able to get best out of the students. Though, offer management degree but have a poor placement scenario. The reasons for poor employability skills of graduating students are lack of conceptual clarity and analyzing business problems to take effective decisions. Thus, there is an urgent need to upgrade the existing status quo of higher educational institutes by expanding its learning capacity. Learning organization would be a panacea for the impending problem of higher educational institutes as it makes organizations more meaningful, focused, and purposeful with involvement of every member in the system. Poor placement records of the past students led to reduced motivation of prospective students, in turn resulting in closure of the institutes. There is an urgent need to make fundamental reforms in the status quo of the institutes. An organizational development initiative with focus on expansion of learning capacity can help institutes sustain. Capacity development initiative should not be constrained to organizational level only, but it should be extended to individual and team level. Major concern is to attract and retain people with talent who can help the students learn and grow. The students with enhanced cognition would serve the growing needs of industry or set up their new ventures to create more job opportunities. Employability skill enhancement and improvement of placement scenarios would follow the trend. A positive correlation between student enrollment in higher educational institutes and their employment potential is the need of the hour. Therefore, it is requisite to endow higher educational institutes as learning organizations with emphasis on quality teaching, research, administration, consultancy, and student employability.

A survey carried out in the year 2013-2014 by Quacquarelli Symonds (QS) World University Ranking and Thomson Reuters have cited the ranking of Indian educational institutes. The survey ranked IIT Delhi at 222, followed by IIT Bombay at 133, IIT Kanpur at 295, IIT Madras at 393, and IIT Kharagpur at 346. The ranking of these institutes were based on the dimensions of teaching, research, knowledge transfer, international outlook, citations, and industry collaboration. The times higher education, World University Rankings 2014-2015 have listed the best global universities with Indian Institute of Science, Bangalore and Punjab University, Chandigarh ranked between 276-300 and IIT Bombay and IIT Roorkee ranked within 351-400. Educational institute should not only emphasize on increasing enrollment, but also continuously monitor the quality of educational programmes so that the passing out graduates are industry ready. This shows that the employability skill is an important parameter to judge ranking of educational institutes. Reasons for not surfacing higher in the global

ranking are lack of updated curriculum, research orientation, funding, and awareness of knowledge repository. This gives a call to administrators, academicians, and policy makers to explore the problems facing present scenario of educational institutes in India. Therefore, government, private sector, and industry experts have taken this as a management issue to be resolved through research and academic intervention.

Promotion of knowledge, innovative ideas, and technical expertise would be key to global competitive challenges. The creation of a highly skilled and competent workforce can lead to economic prosperity of the nation. Employability skills of workforce can be build by upgrading the present education system. Academic institutes need to upgrade their existing education system every five years to avoid obsolescence. By adopting necessary changes in the learning environment, higher educational institutes can develop as a dynamic and vibrant system. There is an urgent need to delve into the matter by redesigning academic programs to meet current needs of industry and society. This can be brought to fruition with the concerted effort of faculty, students, and academic staff by developing higher educational institutes as learning organizations. A learning organization can equip its graduating students with current knowledge and abilities to cope up with emerging challenges across the globe.

Thus, learning organization has emerged as an imminent requirement to develop human competence that can build organization as an employer brand. Competence is assessed through knowledge, skills, and ability that make organizations more productive and sustainable. A learning organization can improve relative position of an institute by promoting continuous learning of its members. To elevate the position of higher educational institutes as a provider of knowledge, the institutes need to adopt continuous improvement practices by promoting teaching and learning. However, lack of leadership, training and development facilities, staff motivation, and attitude of employees towards accepting and embracing change are certain impediments for educational institutes to become learning organization. Therefore, if the institutes have to prosper in the 21st century they must weed out such impediments in their way to transform into a learning organization.

There are certain benchmarks that must be acquired by educational institutes to achieve the status of a learning organization. Though, institutes funded by central/state governments have met those benchmarks to certain extent. Whereas, those in private sector are yet to meet the benchmarks. Developing these institutes as learning organizations would require enormous change in the system, structure, and strategy. As a result, the existing ways of learning, teaching, and research need to be overhauled and new practices need to be embraced.

Complexity theory states that organizations adapt to their environments and cope up with uncertainty (Cohen & Stewart, 2000). This theory considers organizations as collection of structures and strategies. Interactions with various elements in the complex system results in development of an adaptive and flexible system that is favorable for continuous learning.

Traditional organizations faced problems of bureaucracy, red tapism, and top down approach creating barriers in effective learning. Continuous learning organizations require an organic structure with an organic structure, open communication, having attitude for knowledge sharing, risk-taking, and experimentation to foster learning. Organizational learning theory states that an organization adjust in a dynamic environment by expanding its learning capacity (Argyris & Schön, 1978). It is therefore important to facilitate learning practices throughout the organization at all the levels-individual, team, and organizational level.

The current era is marked by rapid competition, political, economic, social, and technological developments, and changing market. The concept of learning organizations is equally relevant to both manufacturing and service sectors. To become a learning organization, the companies need to be skilled at seven activities (1) continuous learning (2) inquiry and dialogue (3) collaboration and team learning (4) systems to capture learning (5) empower people (6) connect to the organization and (7) strategic leadership (Marsick & Watkins, 2003).

Companies like General Electric, Google, Toyota, and Xerox have embraced these principles. Indigenous Indian companies such as Bharti Airtel, Coal India, ICICI bank, Indian Oil Corporation Ltd. (IOCL), Infosys, National Thermal Power Corporation (NTPC), Oil and Natural Gas Corporation (ONGC), State Bank of India (SBI), and Tata Motors have also adopted these practices. Bharti Airtel's centralized knowledge portal, Coal India's innovative leadership programme, and ICICI's academic partnership are few such examples. Talent development, knowledge management, updated computer labs, and library promotes learning at IOCL and Infosys. Top management commitment, teamwork, continuous learning culture, knowledge sharing, employee participation, and teamwork are factors promoting learning at NTPC and SBI. Tata Motors and ONGC have been bestowed with 'The best learning organisation of Asia' and '5th Brijmohan Lall Munjal' award respectively for excellence in learning. All these organizations have set an example for others to develop into learning organizations and benefit from the outcome.

1.2 Objectives of the thesis

With this discussion, we have identified that reforms in the scenario of management institutes operating in India can be possible if they transform as learning organizations. Therefore, the study intends:

1. To identify the enablers of learning at individual, team, and organizational level to build a learning organization.
2. To identify the impact of learning organizations in developing as an employer brand so that it can serve as talent magnet to attract quality faculty and prospective students.
3. To develop and validate scales to measure enablers of learning, learning organizations, and its consequences.

1.3 Scope of the thesis

The scope of the thesis includes management institutes in India.

1.4 Organization of the thesis

The thesis comprises of seven chapters:

1st Chapter: Highlights the problem statement, objectives, and scope of the thesis.

2nd Chapter: Critically reviews literature on learning organizations.

3rd Chapter: Develops a conceptual framework of learning organization integrating individual, team, and organizational level variables.

4th Chapter: Defines research methodology, discusses demographic details of respondents, and tests reliability and validity of the measures developed to conduct the survey.

5th Chapter: Deals with the analysis of hypothesized relationships identified in the conceptual framework.

6th Chapter: Presents the discussion of the results derived from the study.

7th Chapter: Summarizes the findings and gives an overview of the contributions, managerial implications, scope for future research, and limitations of the study.

Next chapter-2 deals with literature review.

CHAPTER-2

REVIEW LITERATURE

2.1 Introduction

Organizations around the globe have been facing dynamic environment because of mergers/acquisitions, technological innovations, intense competition, and new environmental regulations. Changing preferences of customers, shortened product life, lean manufacturing, and just in time delivery compels organizations to be responsive to market demands than their competitors. Quick responsiveness to market dynamism is indispensable without expanding learning capability of organization. Learning or capability building has been recognized as a key competitive strategy to combat pressures engendered by competitive forces that disrupt the existing status quo of an organization. The disruption between present and expected performance of organization can be bridged by expanding learning capacity of organization. Learning results in cognitive and behavioral development (Argyris & Schön, 1978; Meyer, 1982; Fiol & Lyes, 1985). Cognitive development is an outcome of learning from procedural knowledge, rules, and routines acquired from theories, frameworks, symbols, and values. Behavioral development is an outcome of learning from heuristics, insights, know-how, and experience of people to solve non-routine problems. Capacity development of an organization through learning results in attainment of desired status quo, assumptions, understandings, and a completely new frame of reference. During transformation from one frame of reference to the new one, organization learns, unlearns, and relearns to keep itself attuned to the competitive challenges.

Learning enhances absorptive capacity of an organization to sense dynamic forces and adapt to change. Absorptive capacity can be built by unlearning past routines and relearning new knowledge (Chandler, 1962). Organizational learning is one such mechanism to build dynamic capability within organizations to retort to rapidly changing environment (Teece, Pisano, & Shuen, 1997). Other dynamic capabilities are product and process development, intellectual property, and human resources that provide competitive advantage for a short run.

2.2 Organizational learning

Organizational learning has been defined as gaining new insights and knowledge to change existing status quo of an organization (Simon, 1969). Learning occurs as a change in state of knowledge and organizational outcomes in the form of new structure, systems, actions, or

combination of all (Argyris & Schön, 1978). The entire phenomenon is named as learning, adaptation, and change that enhance organization's resilience (Cyert & March, 1963; Chakravarthy, 1982; Dutton & Duncan, 1983; & Starbuck, Greve, & Hedberg, 1978). To achieve long term survival, organizations align with their environment and develop potential to learn, unlearn, or relearn new practices and behaviors. Although, individual learning is of utmost importance. Organizational learning is not merely collective learning of individual members. It is developed through vision, mission, norms, and values of organization having shared meaning.

Organizational learning is a process of collective learning mirrored through examples of Deming's cycle (Plan-Do-Check-Act), Juran's quality control techniques of quality circles, and statistical process control (Revan's 1982). It is also viewed as information processing capacity of organization, where learning is assessed based on information acquisition, distribution, interpretation, and institutionalization (Cyert & March, 1963). Institutionalized knowledge becomes a permanent asset of an organization, irrespective of employee turnover (Nevis, DiBella, & Gould, 1995). System aspect of learning has two sub streams: open and closed system. Open systems envelop adaptive and generative learning through sharing of resources. Whereas, in closed system, learning is confined to organization itself (Burnes, 2000).

The concept of organizational learning started with the work of Argyris & Schön, (1978), Senge, (1990), Huber, (1991) to popularize learning in management-consulting firms (Robinson, 2001). Argyris & Schön, (1978) defined organizational learning as correction and detection of error. Their contribution on organizational learning is mainly on single and double loop learning. Their emphasis is on individual learning through formal and action learning methods. Individuals learn through formal training, interaction, and brainstorming to solve problems without questioning its deeply held assumptions and beliefs called single loop learning. When learning is associated with questioning deeply held assumptions and beliefs of organizations it is called double loop learning. Argyris & Schön, (1978) have identified organizational routines, procedures, and policies as certain barriers to organizational learning. However, they ignored the role of individual and organizational level learning as a catalyst in double loop learning. Secondly, their focus is on learning within the existing frame of reference and ignored learning while transforming organizations to a new frame of reference through challenging fundamental core of an organization. Thirdly, they ignored explicit knowledge and triggers that spur learning process. However the work of Senge, (1990) has made certain advancement in bridging some of the shortcomings of Argyris & Schön, (1978).

The terminology of learning organizations has been coined by Peter Senge in 1990's. Learning organization is an ideal type of organization where people continually develop their capability through sharing of ideas and learning collectively to generate and acquire new knowledge. The basic premise of learning organizations is built on the concept that each individual has an urge of learning. Senge described five disciplines of learning that must be present to build a learning organization. These disciplines are personal mastery, mental models, shared vision, team learning, and systems thinking. Personal mastery is emphasis on personal growth and learning of an individual. Mental models are shared assumptions held by people that help in interpreting information. Shared vision is vision of organizational members. Team learning is the collective learning of all employees. Systems thinking proposes that an organization cannot function in silos, rather as an integrated whole. Mental models and team learning highlights on social learning through collective understanding of employees through dialogue, inquiry, and reflection of past actions, referred as generative learning or double loop learning. When learning results in minor modification or fine tuning of organization's routines, assumptions, and existing practices it is called adaptive learning or single loop learning. Personal mastery, mental models, shared vision, team learning, and systems thinking are necessary requisites for learning in an organization. Senge, (1990) links these five disciplines of learning at individual (personal mastery and mental models), team (team learning), and organizational (shared vision and systems thinking) levels. Senge focuses on the tacit know-how or learning from experiences of people and ignores the barriers during transfer of learning at all three levels. Role of knowledge management and organizational structure in learning has been completely ignored and has been addressed as the weakest area of Senge's work (Huber, 1991).

Huber, 1991 perceived organizations as organisms having capacity to sense information and show behavioral responses accordingly. Learning takes place in the form of mental models or cognitive structure. The objective of learning is to enhance absorptive capacity with focus on information systems of organization. Information systems can help in information acquisition, distribution, interpretation, and institutionalization. Information acquisition is the process by which information is obtained. Information distribution is the process by which information is shared by individuals. Information interpretation is having meaningful interpretation of shared message. Institutionalization is storing meaningful information for future reference in organizational memory. Huber categorizes these four constructs into three levels of learning: individual (information acquisition), team (information distribution and interpretation), and organizational (institutionalization). However, Huber has ignored the importance of tacit

knowledge creation. Secondly, motivators and barriers in the learning process at all the three levels have not been emphasized.

Thus, the above discussion highlights major gaps in literature such as how transfer of learning takes place from individual to team and organizational level, which is yet to be explored. The researchers have also not discussed enablers and barriers in the learning process. This process starts from knowledge acquisition of individuals until the collective knowledge is created (Tripathi & Nongmaithem, 2007). To overcome these shortcomings Nonaka (1994) gave SECI model (socialization, externalization, combination, and internalization) to discuss the process of knowledge creation, which exhibits learning from tacit to explicit sources and vice versa. Tacit knowledge refers to personal knowledge that is hard to formalize and communicate, whereas, explicit knowledge is an objective form of knowledge that can be stored in formal and systematic language such as documents, databases, and spreadsheets (Cong & Pandya, 2003). Individuals create knowledge through the conversion of tacit and explicit knowledge. This conversion process is defined in SECI model: a) socialization (tacit to tacit), b) externalization (tacit to explicit), c) combination (explicit to explicit), and d) internalization (explicit to tacit). The four modes of SECI model are pronounced through various organizational theories: (a) socialization is connected with organizational culture theory, (b) externalization with information creation theory, (c) combination with information processing theory, and (d) internalization with organizational learning theory. However, Nonaka only discussed the process that links individuals and groups and did not discuss the link between groups and organizations.

Later on, 4i-learning model has been developed to analyze learning processes at individual, team, and organizational levels (Crossan, Lane, & White, 1999). This model identifies four processes of learning: intuition, interpretation, integration, and institutionalization. Intuition is an individual level learning and is preconscious recognition of opportunities due to an individual's personal experiences. Interpretation and integration is team learning and expression of ideas through social interaction that results in development of a uniform language for interpretation. Institutionalization takes place at an organizational level, where meaningful information in the form of mental models are stored in the organizational memory for future reference. Organizational learning is a dynamic activity that occurs through assimilating new learning, otherwise called as feed forward where ideas and actions flow from individuals to teams to organizations. Whereas, exploiting what the organizations have already learned is called as feed back process, where learning flows from organizations to teams to individuals.

They gave a complete overview of how learning takes place at all the three levels and gets institutionalized in the organizational memory. Thus, learning occurs at individual, team, and organizational level.

2.2.1 Individual level learning

Individuals are agents who can be motivated to learn only if they internalize the discrepancy between organization's present and the expected performance. This discrepancy in performance can be bridged through acquiring new insights (Fiol & lyles, 1985). New insight is gained through learning from other members of organization called tacit knowledge and from organizational rules and procedures in explicit form. In this process individuals update their perceptions and form a new mental model.

Individual learning is a precondition for organizational learning (Kim, 1993). This is because people are assets of organizations and they can learn certain skills, knowledge, attitude, and values through self-study, observation, and from technology mediated programmed instructions (Marquardt, 2014). Learning enhances individual's capacity to interpret and analyze organizational problems to provide a feasible solution (Marsick &Watkins, 2003). Yet, many scholars concentrate only on the individual learning, stating that it is a prerequisite to organizational learning and new knowledge emanates from individuals (Argyris & Schön, 1978; Nonaka, 1991; Probst & Büchel, 1997). Therefore, organizations foster individual learning by providing continuous learning opportunities such as self managed learning, learning from others, experiential learning, and personal insights (Marquadt, 2014; Marsick &Watkins, 2003).

2.2.2 Team level learning

Several authors have also pointed out the importance of team. Team learning is one of the foundations for learning organization in modern organizations as unless teams learn, organizations cannot learn (Pawlowski, 2003; Senge, 1990). Team learning is enhanced by acquiring information and knowledge from experimentation and information acquisition across other individuals through process of dialogue and inquiry to create a shared understanding (Abu-Tineh, 2011). Through teams, individuals learn to work collaboratively to achieve common goals (Marsick &Watkins, 2003). Teams think, create, and learn as an entity to share experiences with other teams in the organization thereby ensuring a successful team learning system.

2.2.3 Organizational level learning

Organizations learn through individuals and teams that occurs through shared insights, knowledge, and mental models of organizational members. It is build on the past knowledge

and experience which is institutionalized to retain knowledge. It takes place through the individuals and their social interactions to improve actions (Probst & Büchel, 1997; Fiol & Lyes, 1985). Unlike individual learning, organizational learning is not merely collective learning of members, but is shared understanding preserved in cognitive systems and memories in the form of behaviors, norms, values, and mental maps. Thus, organizational learning cannot occur in isolation. It is an incremental and interdependent process.

Therefore, learning at individual, team, and organizational level has been critically synthesized from disciplines of psychology and organizational development, management science, sociology and organization theory, culture, strategy, and production management (Easterby-Smith, 1997). Psychology and organizational development focus on individual's cognition, learning styles, and ethical values. Management science emphasizes on role of information processing to generate knowledge. Sociology and organization theory support role of group dynamics and organizational structure to facilitate learning. Strategic management emphasizes on organization-environment fit to build a learning organization. Production management highlights contribution of productivity in learning. Cultural perspective cites role of culture as an enabler of learning. Table 2.1 cites contribution of management science and organizational development to discipline of learning.

Table 2.1: *Contribution of Management Science/Organizational Development to Discipline of Learning*

S.No.	*Author, year*	*Contribution*
Perspective of management science and organizational development		
1	Senge, 1990	Personal mastery, mental models, shared vision, team learning, and systems thinking are five constituents of learning organization (Management science). Commitment of top management, empowerment, collaboration, facilitate organizational learning (Organizational development).
2	Garvin, 1993	Systematic problem solving, and experimentation (Management science). Learning process and outcomes (Organizational development).

3	Dibella, Nevis, & Gold, 1995; Huber, 1991	Knowledge acquisition, sharing, and utilization (Management science). Measurement and operation (Management science). Climate of openness, leadership, and continuous education as facilitators of learning (Organizational development).
Organizational development perspective with emphasis on human development		
1	Revans, 1971	Action learning.
2	Bateson, 1973	Evolutionary model of learning.
3	Kolb, Rubin, & McIntyre, 1973	Learning from action, reflection, and experimentation.
4	Argyris & Schön, 1978	Single, double, and triple loop learning.
5	Pedler, Boydell, & Burgoyne, 1991	Cyclical model of vision and action.
6	Nonaka, 1994	Cyclical model of tacit and explicit knowledge.
Balanced perspective of management science and organizational development		
1	Jones & Hendry, 1994	Overall capability can be enhanced by formal/informal and tacit knowledge.
2	Burgoyne, Pedler, & Boydell, 1994	Links learning and strategy.

3	DiBella, 1995	Learning capability building perspective.
4	Nanda, 1996	Learning organizations improves capabilities through experience.

(Source: Above mentioned respective research papers)

Thus, organizational learning is a dynamic activity with affiliation from varied disciplines of management. Therefore, learning is a complex phenomenon, and a firm operating in a dynamic and disruptive environment has to continuously learn, adapt, and change in order to be competitive. Organization adopts an ambidextrous approach of single and double loop learning to be responsive to competitive challenges. Learning is often accompanied by unlearning redundant practices and methods. Routines, practices, and behaviors, which were once reasons for organizations past success cause competency trap and require unlearning (Hislop, Bosley, Coombs, & Holland, 2014; Shipton, 2006). Generally individuals don't want to move out of their comfort zone and resist changing status quo of organizations (Örtenblad & Koris, 2014). Individuals are hesitant to discard their current beliefs, assumptions, and practices/methods unless they experience failure. Thus, organizational unlearning is required to adapt to change.

2.3 Organizational unlearning

Organizational unlearning is dismantling and discarding of obsolete knowledge (Hedberg, 1981). It is a process of reducing or eliminating the existing knowledge (Newstrom, 1983). It can be accidental or deliberate loss of established knowledge. Accidental unlearning is an unconscious loss of knowledge that occurs inadvertently because of employee attrition and lack of use. Whereas, deliberate unlearning is a conscious loss of knowledge through abandoning established behaviors and practices (De Holan & Phillips, 2004; Rushmer & Davies, 2004). Deliberate unlearning consists of deep unlearning and wiping (Hislop, Bosley, Coombs, & Holland, 2014). Deep unlearning is cognitive unlearning of values, assumptions, norms, and beliefs, otherwise called double loop learning (Baumard & Starbuck, 2005; Tsang & Zahra, 2008). It occurs as a result of continuous change. Wiping is a type of single loop learning where basic assumptions are not changed rather there is a change in the behavior. It occurs as a result of episodic change. In order to imbibe new knowledge beneficial to organizations and

simultaneously discard redundant knowledge, a conscious process of deep unlearning is required.

The process of organizational unlearning consists of three stages: receptiveness, recognition, and grieving (Mac Donald, 2002). Receptiveness is person's readiness to accept new perspectives and viewpoints. Recognition is the realization to search for alternatives. Grieving is an emotional state of unwillingness shown by an individual to give up learnt behavior. Replacement theory of Hedberg (1981) states that obsolete knowledge need to be discarded from both individual and organizational memory. Parenthetic theory (Klein, 1989) states that old knowledge is never erased, rather maintained in the minds of individuals. Individuals garner and apply new knowledge according to contingent situations (Niaura, 2002). Thus, unlearning doesn't require an individual to extrude all the accumulated experiences, it means to stay open to diverse ways of getting things done, otherwise called as organizational relearning.

Organizational relearning is a process whereby an organization is adapted to new mental models, procedures, and routines (Pratt & Barneet, 1997). It is a continuous process where new knowledge structures are replenished and facilitate organizations to build new competitiveness (Tabassum Azmi, 2008; Akgün, Byrne, Lynn, & Keskin, 2007b). Thus, success of an organization demands constant state of adaptation, continually unlearning old practices, and relearning new ones. This process of organizational renewal can be related to the concept of time and event pacing. Time pacing is a strategy for competing in fast changing unpredictable markets. Whereas, event pacing is a strategy of scheduling changes with changing events such as shifts in technology, new customer demands, or changing legal framework.

Thus, business organizations remain agile by learning, unlearning, and relearning (LUR) (Tabassum Azmi, 2008). LUR model is a continuous process constituting moving stage of Lewins process model of change (Akgün, Byrne, Lyun, & Keskin, 2007b). Unlearning is an important condition to infuse new learning. Studies on organizational unlearning have been mostly conducted at individual/team level (Navarro & Moya, 2005; Mavin, Bryans, & Waring, 2004), individual/organizational level (Becker, Hyland, & Acutt, 2006), and at each of individual/team/organizational level independently. Like organizational learning, unlearning and relearning also happens at individual (Becker, 2010; Navarro, Eldridge, & Sanchez, 2012; Low, 2011; Mac Donald, 2002; Rushmer & Davies, 2004), team (Akgün, Byrne, Lyun, & Keskin, 2007a; Lee, 2011), and organizational levels (De Holan, 2011; Lee & Sucoko, 2011; Pighin & Morzana, 2011; Srithika & Bhattacharya, 2009; Wong, Cheung, Yiu, & Hardie, 2012). Organizations abandon previous methods and embrace new behaviors and actions

through the process of individual/team unlearning/relearning (Bridges, 1991; Duffy, 2003; Hamel & Prahalad, 2013). Thus the process of learning, unlearning, and relearning follows a continuous cycle.

Organizations build strategies and structure with an intention to enhance learning experience and develop a learning organization. Learning organization cultivates a climate conducive for learning. But the process of organizational learning and how it builds a learning organization is still blurred. Learning organization has received much attention by practicing managers in the west and it is developed on the literature of organizational learning. Learning organization has been focus of researchers and the difference between organizational learning and learning organization is still a misnomer. Organizational learning literature focuses on systematic acquisition of internal and external knowledge and structures that facilitates learning and adaptability to fast changing environment. The concept of learning organization has emerged from discussions of consultants and senior managers and is more application oriented. The literature is focused on developing human potential rather than discussing underlying processes to enhance learning. Table 2.2 illustrates the distinction between organizational learning and learning organization. Organizational learning is a process of transformation of learning at individual/team level to organizational level and learning organization is a metaphor for an ideal organization.

Table 2.2: *Comparison between Organizational Learning and Learning Organization*

Authors, year	*Organizational learning*	*Learning organization*
Dodgson, 1993	Learning takes place naturally	Requires effort to become a learning organization
Blackler, 1995	Knowledge resides in the minds of an individual	Knowledge resides in both individual as well as organizational memory
Goh, 1998; O'keeffe, 2006	Suggests role of limited organizational practices on learning	Suggests appropriate blend of organizational practices for learning
Finger & Brand, 1999; Örtenblad, 2001; Tsang, 1997	A process by which organizations can become learning organizations	Is an outcome of organizational learning
Örtenblad, 2001	Focuses on the individual learning	Focuses on individual, group, and organizational levels of learning
Armstrong & Foley, 2003	Focuses on the means	Focuses on the ends

(Source: Above mentioned respective research papers)

The literature on organizational learning and learning organization is further divided as descriptive and perspective (Robinson, 2001). Literature on organizational learning is descriptive with emphasis on study of learning processes. It concerns with how individuals learn in the organization. Whereas, literature on learning organization is prescriptive with emphasizes on building an ideal organization that learns continuously. However, the literature emphasizes more on transforming an organization from its present state to a desired state through the transfer of learning at all the three levels: individual, team, and organizational. Therefore, organizational learning is necessary for transforming into learning organizations. Research on learning organizations emphasizes on creation, acquisition, and dissemination of knowledge to expand insights and cognition of employees and modify their behavior (Garvin, 1993). Collective learning of all members transforms their mental models (Pedler, Burgoyne, & Boydell, 1991). Social learning theory states that behavior of individuals changes the organizations (Bandura, 2001). Thus, organizational learning is a collaborative effort where individuals create new ideas and insights through sharing of knowledge.

2.4 Learning organizations

Learning is an imminent requirement of a learning organization procured through planned method (Wang & Ahmed, 2003). Learning organization has been defined as an organization that develops capability to respond to dynamic environment through continuous learning and adaptability promoting culture of learning (Kezar, 2005; Yang, Watkins, & Marsick, 2004).

The literature on learning organizations falls into two major categories: variable view and a metaphor view (Garavan, 1997). Learning organization as a variable requires certain traits to influence behavior of employees and performance of an organization. Basically, variable view discusses about antecedents and consequences of a learning organization. Metaphor view of learning organization perceives organization as: technical process and culture. Learning organization as a technical process metaphor states that an organization can be designed by manipulating specific variables resulting in enhanced performance. This is done by acquiring knowledge and skills necessary to accomplish the task. This perspective is popular among the practitioners who are seeking ways to make their organization efficient. Organization as a technical process ignores the influence of politics. However, Peter Senge states that politics exits in every organization and it can be treated as a variable, which is managed through open dialogue.

On the other hand, learning organization as a cultural metaphor views an organization as expressive, idealistic, and symbolic (Jones, 1995). Cultural metaphor is created by fostering

learning related values and occurs through informal exchange of cultural artifacts: stories and rituals (Bratton, Mills, Pyrch, & Sawchuk, 2003). This approach is less concerned with the outcomes of learning organization and concerns more with the processes that create a learning culture. Thus, the conceptualization of learning organization as a cultural metaphor attracts researchers who are interested in understanding the process that leads to the formation of a learning organization. However, this approach of learning organization raises some major concerns. Firstly, viewing organizations as system having functional unity is like treating organizations as organisms. But in reality organization constitutes vision, norms, and beliefs. Secondly, learning organization has been analyzed as a network of shared symbols that lead to shared learning (Martin, 1992). Thus, the abstract nature of this concept of learning organization as a metaphor is less popular with researchers who wish to study a pragmatic approach.

There is an overflow of literature on learning organization, which is rapidly expanding and has been discussed in detail in section 2.4.2. Learning organization has been defined in several different ways by researchers (Table 2.3). However construct of the learning organization begins with the seminal work of Peter Senge.

Table 2.3: *Definitions of Learning Organizations Given by Various Authors*

Author	*Definition*
Dibella , Nevis, & Gold, 1996	An organization having continuous capacity to learn, adapt and change, its values, policies, practices, systems, and structures to accelerate learning of all employees.
Gephart, Marsick, Van Buren, & Spiro, 1996	An organization that analyzes, monitors, develops, manages, and aligns learning process to improve and innovate.
Dowd, 1998	A group of people engaged in continuous learning.
Rowden, 2001	An organization in which everyone is engaged in solving problems, experimenting, changing, and increasing capacity to attain its objective.
Lewis, 2002	An organization in which employees are continually acquiring and sharing knowledge to make decisions and improve job performance.
Armstrong & Foley, 2003	A learning organization has visions, values, assumptions, and behaviors supporting learning to foster employee development.

Moilanen, 2005	A learning organization is a consciously managed organization with learning as a vital component in its values, vision, goals, and everyday operations.
Bowen, Rose, & Ware, 2006	Learning organization promotes opportunity to learn and exhibit competence.
Rebelo & Duarte Gomes, 2008	Learning organization is a prescriptive approach that helps organization to enhance their learning capability and benefit from it.
Alipour & Karami, 2011	Learning organization facilitates learning, knowledge creation, and knowledge management in an organization.
Farrukh & Waheed, 2015	Learning organization is an organization where members learn individually and collectively to create a sustained source of competitive advantage.

(Source: Above mentioned respective research papers)

2.4.1 The learning organization: Peter Senge Overview

Looking into different studies and exploring some of the emerging themes, many organizations recognize the significance of learning organizations. Learning organization emphasizes on learning of members by sharing their thought process and deriving results (Senge, 1990). Personal mastery, mental models, shared vision, team learning, and systems thinking are five disciplines of learning organization.

2.4.1.1 Personal mastery

Personal mastery emphasizes on personal growth and learning of an individual. Higher personal mastery means higher skills for creating a personal vision, encouraging people to take initiatives, and innovating at a faster pace. Two dimensions of personal mastery are current reality and personal vision. Current reality is where we are. Personal vision is what we want. The gap between these creates tension. The tension can be reduced by developing the competence and skills, but it is developing an individual's vision and striving to achieve the goals. Individuals having personal mastery have self-visions and strive to learn more and have a stronger sense of commitment.

2.4.1.2 Mental models

Mental models are assumptions that guide an individual to interpret information and take action (Senge, 1990). Reflection and inquiry are two skills, which individuals can practice along with mental models. Reflection is deep thinking of past events and experiences that strengthens our mental models and influences our behavior. Inquiry facilitates face-to-face interactions and helps in learning from experience of other people. Both these changes in skills can help to change mental models and bring changes in individual's behavior. Changing mental models require greater patience and perseverance and a flexible organizational structure to embrace learning. Mental models helps employees to take rational decision through questioning previous beliefs and assumptions.

2.4.1.3 Shared vision

Shared vision is the concerted efforts of members to develop a common vision. It is a guiding force to enable the organizations to keep learning activities on course. Shared vision consists of compliance and commitment. Compliance is having trust with the leaders and his vision and striving to achieve it. Whereas, commitment is the responsibility taken by employees to work towards fulfillment of that vision (Senge, 1990). Therefore, vision is shared when people trust each other. But shared vision cannot exist without a personal vision. An organization encourages employees to form a personal vision in order to start the process of shared vision. Shared vision is time consuming and requires on going discussions and dialogues. Thus, new insights are developed through sharing of ideas.

2.4.1.4 Team learning

Team learning is the collective learning of all employees. It is the process of developing absorptive capacity of team members (Senge, 1990). It allows team members to think and act collectively and systematically. Collective learning of team members helps them to think out of the box to be innovative. Dialogue and discussion create an alignment within the team and lead to a shared vision. Dialogue helps them to discover new insights. Discussion results in goal congruence through consensus.

2.4.1.5 Systems thinking

Systems thinking emphasizes that an organization cannot function in silos but as an integrated whole. System thinkers are those who think unconventionally and see the whole picture and seek for interdependencies. Systems thinking is regarded as the thread that ties all the other

above-mentioned disciplines of learning organization. Organizations engage in systems thinking to develop new ideas and realize greater organizational goals with collective responsibility to implement change.

According to Senge (1990), by incorporating five disciplines, an organization can become learning organization. Each organization is distinct from the other in terms of informal subsystems such as culture, power and politics, and leadership style. Peter Senge has discussed about an ideal organization from his experience of a practicing manager.

2.4.2 Dimensions of learning organization in manufacturing and service sector

Learning organizations serve as a talent magnet for current and potential employees. Therefore, to be an employer of choice, organizations both in manufacturing and service sector are slowly embracing the concept of learning organizations. However, there is inherent difference in the nature of manufacturing and service organizations. But, moreover, the dimension of learning organizations adopted by both these sectors are more or less similar. Their emphasis is on openness, proaction, and experimentation to support learning culture (Singh, 2010). Challenging nature of work, member cooperation, transparent communication, and idea generation promotes learning. Shared vision, flexible systems, and team dynamics are features of Singaporean manufacturing firm as a learning organization (Yeo, 2008). Shared vision is collective commitment of employees. Flexible systems promote cohort learning. Team dynamics is collaborative effort of individuals. Open communication, risk-taking, experimentation, and leadership are predictors of learning in service firms (Amy, 2008). Indian manufacturing and service firms have not found any difference in dimensions of learning organizations, as these dimensions are indispensible for every individual's career growth (Awasthy & Gupta, 2011).

Similarly, educational institutes can also be developed as learning organizations by upgrading curriculum, promoting teaching and research, maintaining equitable teacher-student ratio, facilitating teacher education, and generating conducive environment to impart quality education (Education Commission, 1884-1992; Education and Manpower branch and education department, 1991). Attempt has been made to transform primary, secondary, and vocational schools as learning organizations (Mazen, Jones, & Sergenian, 2000; Thornett & Viggiani, 1996). The European Foundation for Quality Management has been implemented in schools as a self-assessment tool to improve examination results and self-esteem of teachers by updating pedagogy, open communication, constructive criticism, experimentation, and risk-taking.

Psychological commitment, empowerment, teamwork, trust, participation, visionary leadership, management support, and teacher commitment have been considered as factors of learning organization in educational institutes (Giles & Hargreaves, 2006). Till today, educational institutes have been following traditional teaching methods, which are cost effective. They impart formal education with emphasis only on conceptual learning, which does not enhance learning of students (Libradilla, Teves, & Teves, 2015). The graduating students from these institutes are incapable to solve practical problems (Frank, 1996). Therefore, a necessary shift in pedagogy is required to enhance employability skills of graduating students and making them industry ready. Action learning would help in invoking thoughtful insights and capability building of faculty that will make their teaching and learning more effective (Teves, 2012). The ultimate responsibility lies with all the stakeholders, especially the faculty members to initiate learning at individual, team, and organizational levels. They can contribute by adopting innovative methods of teaching and research. With their experience, cognition, and vision they can contribute to institute's vision as well as meet their own personal goals (Garavan, 1997; Teves, Tantiado, & Teves, 2014).

However, building a learning organization is a mammoth task, which cannot be attained through formal training but by transforming core of an educational institute. Institutes adopt transformational change in strategy, structure, processes, and organizational culture. They adopt open communication, risk taking, recognition for learning, teamwork, and knowledge sharing. Faculties are the centrifugal force to transform the system as they influence students as facilitator and guide (Garvin, Edmondson, & Gino, 2008). The interactive learning would help students to develop their emotional and socio-cognitive intelligence. However, budget constraints are major impediments in their initiative to facilitate developing a learning organization (Rich, 2011). For learning to take place, a leader play a significant role in creating a shared vision and fostering learning and developing personal mastery of its employees. Role of educational leader is to develop the vision of the institute in a way that learning is rewarded. Leaders ensure that information reaches the institute in a manner that is intuitive, useful, and timely (Hallinger, 1998). Today's era is based on the collaboration and team learning indicating that everyone in the institute feels that their ideas and knowledge are valued and have importance in the society. Thus, leaders focus on the energy and talent and make an environment open for knowledge sharing.

To our knowledge, there is paucity of literature on both conceptual and theoretical model of learning organization. Most of academic literature has identified the antecedents of learning organization with intention to develop questionnaires or a case study, creating a void to develop

a holistic model of learning organization. Although, academic literature has extensively discussed diagnostic tools of learning organization. Few of these tools have been empirically tested. Table 2.4 explains existing diagnostic tools of learning organizations along with its dimensions, contributions, and limitations. Assessment of learning organizations has been more subtle and inconsistent. Literature on measurement instruments of learning organizations has been critically analyzed from the period 1950-2015. These studies have used certain variables like shared vision (Senge, 1990), leadership (Watkins & Marsick, 1993), knowledge management (Maden, 2012), communication (Tannenbaum, 1997), teamwork (Pedler, Burgoyne, & Boydell, 1991), organizational structure (Örtenblad, 2004), risk taking (Rich, 2011), continuous learning (Armstrong & Foley, 2003), organizational culture (Goh, 1998), trust (Retna & Tee, 2006), strategy (Pedler, Burgoyne, & Boydell, 1991), environment (Ramnarayan, 1996), and system (Watkins & Marsick, 1993) for developing measurement instrument to assess an organization as learning organization. Table 2.5 illustrates the variables widely used by researchers in context of learning organizations.

Table 2.4: *Diagnostic Tools of Learning Organization*

S.No.	*Diagnostic tools/ Author, Year*	*IL*[a]	*TL*[b]	*OL*[c]	*Contributions and limitations*
Empirically tested					
1	Organizational learning diagnostics Pareek, 1988	✗	✗	✓	Characteristics of learning organizations
2	The learning company questionnaire Pedler, Burgoyne, & Boydell, 1991	✓	✓	✓	Theoretical framework of learning organization developed with eleven dimensions based on research study of British companies
3	Dimensions of learning organization questionnaire Watkins & Marsick, 1993	✓	✓	✓	Characteristics of learning organizations are developed into an integrated model, but doesn't study the cause and effect relationship among the variables
4	Organizational learning capability Ramanarayan, 1996	✗	✗	✓	Characteristics of learning organization through a survey conducted by Indian public and private organizations
5	System-linked organizational model Marquardt, 1996	✓	✓	✓	Identification of interrelated subsystems but doesn't provide outcome of learning organization
6	Faster learning organziations Guns, 1996	✗	✗	✓	Dimensions of learning organization
7	Organizational learning capacity Hult & Ferrell, 1997	✓	✓	✓	Characteristics of learning organization
8	Learning environment survey Tannenbaum, 1997	✗	✗	✓	Specifically meant for job related learning
9	Learning environment questionnaire Armstrong & Foley, 2003	✗	✗		Measures cultural and structural aspects of learning organization

a IL is Individual level

b TL is Team level

c OL is organizational level Note: 3 Check marks at ✓ IL, TL, OL indicates presence of dimensions at all levels.

10	Diagnostic tool of learning organization Tichá & Bolcek, 2004	✓	✓	✓	Identification of dimensions of learning organizations but doesn't represent an integrated model
11	Organizational learning capability scale Jerez-Go´meza, Ce´spedes-Lorente, & Valle-Cabrera, 2005	✗	✗	✓	Learning processes are developed based on perception of respondents of one industry
12	School success profile learning organization measure Bowen, Rose, & Ware, 2006	✗	✗	✓	Learning organization measure developed for schools
Not Empirically tested					
1	Five disciplines of learning organization Senge, 1990	✔	✔	✓	Conceptual framework of learning organizations
2	Building blocks of learning organization Garvin, 1993	✗	✗	✓	Performance assessment scale for team, department, and organization
3	The complete learning organization benchmark Mayo & Lank, 1994	✓	✓	✓	Developed a holistic tool, but does not describe purpose and end usage
4	Learning organization capability assessment Redding & Catalanella, 1994	✗	✗	✓	An instrument of learning organization
5	The learning audit Pearn, Roderick, & Mulrooney, 1995	✗	✗	✓	Encourages learning of managers and departments
6	A quick test for learning organization Otala , 1996	✓	✓	✓	Importance of learning organization has been laid

7	Recognizing your organization Sarala & Sarala, 1996	✗	✗	✓	To assess status of an organization as learning organization
8	Strategic building blocks of learning organizations Goh & Richards, 1997	✗	✗	✓	Emphasis on building blocks of learning organizations but doesn't measure its outcome
9	The learning organization diamond Moilanen, 2005	✗	✗	✓	Develops a framework for analyzing learning organizations. Perceives organizations as diamond shaped. The upper part demonstrates level of learning at organization and lower part deals with learning of individuals. The tool can be used to access learning within the firm but cannot compare learning between two firms
10	An integrated model of learning organization Örtenblad, 2004	✗	✗	✓	Antecedents of learning organization have been identified. It doesn't measure its outcome variable
11	Diagnosis organizational learning capability Visser, 2009	✗	✗	✓	Tested on practicing managers in profit and non-profit organizations
12	Transformation of public organizations to learning organizations Maden, 2012	✗	✓	✓	Antecedents of learning organization have been identified and developed into a model

(Source: Lenka & Chawla, 2015)

Table 2.5: *Variables Widely Used by Researchers in Context of Learning Organizations*

	Variables	*Contribution by various researchers*
1	Leadership	Watkins & Marsick, 1993; Mayo & Lank, 1994; Pearn, Roderick, & Mulrooney, 1995; Nevis, DeBella, & Gould, 1995, Otala, 1996; Gephart, Marsick, & Van Buren, 1997; Goh, 1998; Hiatt-Michael, 2001; Jerez-Go´meza, Ce´spedes-Lorente, & Valle-Cabrera, 2005; Retna & Tee, 2006; Garvin, Edmondson, & Gino, 2008, Moloi, 2010
2	Culture	Galer & Heijden, 1992; Mayo & Lank, 1994; Nevis, DeBella, & Gould, 1995; Pearn, Roderick, & Mulrooney, 1995; Otala, 1996; Gephart, Marsick, & Van Buren, 1997; Goh, 1998; Örtenblad, 2004; Maden, 2012.
3	Communication	Watkins & Marsick, 1993; Tannenbaum, 1997; Philips, 2003; Jerez-Go´meza, Ce´spedes-Lorente, & Valle-Cabrera, 2005, Retna & Tee, 2006; Visser, 2009; Moloi, 2010; Rich, 2011.
4	Trust	Galer & Heijden, 1992; Hiatt-Michael, 2001; Retna & Tee, 2006.
5	Knowledge management	Pedler, Burgoyne, & Boydell, 1991; Garvin, 1993; Watkins & Marsick, 1993; Mayo & Lank, 1994; Marquardt, 1996; Goh, 1998; Otala, 1996; Gephart, Marsick, & Van Buren, 1997; Phillips, 2003; Tichá & Bolcek, 2004; Bowen, Rose, & Ware, 2006;Jerez-Go´meza, Ce´spedes-Lorente, & Valle-Cabrera, 2005; Visser, 2009; Rich, 2011; Maden, 2012.
6	Teamwork	Senge, 1990; Pedler, Burgoyne, & Boydell, 1991; Watkins & Marsick, 1993; Mayo & Lank, 1994; Hult & Ferrell, 1997; Goh, 1998; Moloi, 2010; Rich, 2011.
7	Structure	Pedler, Burgoyne, & Boydell, 1991; Pearn, Roderick, & Mulrooney, 1995; Otala, 1996; Sarala & Sarala, 1996; Gephart, Marsick, & Van Buren, 1997; Örtenblad, 2004.
8	Risk	Retna & Tee, 2006; Rich, 2011.
9	Shared Vision	Pareek, 1988; Senge, 1990; Otala, 1996; Goh, 1998, Moloi, 2010.
10	Strategy	Pedler, Burgoyne, & Boydell, 1991; Guns, 1996.
11	Environment	Watkins & Marsick, 1993; Pedler, Burgoyne, & Boydell, 1991; Ramnarayan, 1996; Armstrong & Foley, 2003; Garvin, Edmondson, & Gino, 2008.
12	System	Senge, 1990; Watkins & Marsick, 1993; Nevis, DeBella, & Gould, 1995; Hult & Ferrell, 1997; Jerez-Gomez, Céspedes-Lorente, & Valle-Cabrera, 2005; Moloi, 2010.
13	Learning	Watkins & Marsick, 1993; Nevis, DeBella, & Gold, 1993; Mayo & Lank, 1994; Pearn, Roderick, & Mulrooney, 1995; Ramnarayan, 1996; Tannenbaum, 1997; Hult & Ferrell, 1997; Armstrong & Foley, 2003; Örtenblad, 2004; Rich, 2011.

(Source: Lenka & Chawla, 2015)

It has been analyzed that these tools and frameworks are primarily used by consultants and practitioners to assess the learning activities taken up by an organization.

The most comprehensive tool of learning organizations has been developed by Marsick & Watkins, 2003. This *'Diagnostic learning organization questionnaire'* (DLOQ) consists of seven dimensions of learning organization that is organized in five sections: individual, team, organizational, financial performance, and knowledge performance. However, it only serves the purpose of assessment of learning in an organization and doesn't study the cause and effect relationship between different variables. Secondly, one of the individual level variable inquiry and dialogue, is also used as team level variable with an argument justification that dialogue is a process of interaction with other individuals. This argument has been supported by Nonaka, 1994, who stated that individuals socialize through process of interaction and dialogue thereby converting tacit knowledge to explicit knowledge. Thirdly, the outcome financial performance is not a constant key of learning organization because it cannot be measured using primary data. This can only be done through secondary data and by comparing previous performance of organization. Lastly, for measuring the level of learning through DLOQ, researcher must keep organizational culture in mind as culture and behavior varies from firm to firm and even from person to person respectively (Rasheed, Ali, & Javaid, 2014).

2.4.3 Watkins and Marsick Construct

Although Senge was credited with the learning organization concept, this conception was enhanced by the theories and writings of others (Herrera, 2007). The five disciplines of Peter Senge work together to create an ideal type of organization called a learning organization. Senge enlisted only qualitative attributes and characteristics that a learning organization must have. Also, Senge's work was lacking practical approach based upon philosophy and idealistic views, whereas, the main contribution of Watkins and Marsick is measurement and substantiation of the construct of learning organization. They provided a multidimensional way to measure the status of learning organizations. They have developed an integrative perspective model of learning organization with seven dimensions that are implemented in learning organization at individual, team, and organizational level (Lunenburg, 2011). It explained qualitative attributes of learning organization with practical application of

learning organization. Thus, their model directs learning process in an organization. They have provided the model of learning organization with emphasis on informal learning to transfer and share knowledge. Organizations can compare their results with other organizations and improve their status to become a learning organization. However, inspite of certain gaps in literature discussed in the previous section, Watkins & Marsick, 1993 explored a complete overview of learning organization. DLOQ has also been validated in different cultural context including India as an assessment tool to measure learning (Awasthy & Gupta, 2011). Therefore, this study has adopted Watkins & Marsick, 1993 model of learning organization to study cause and effect relationship between antecedents and consequences of learning organization. They defined learning organization as a continuous learning initiative to improve and develop organizations capability. They identified seven interdependent dimensions of learning organization at individual, team, and organizational level. Firstly, individual learning is composed of two dimensions: continuous learning and inquiry and dialogue. Continuous learning is an endeavor to enhance learning at individual level. Inquiry and dialogue means organizations create a culture of questioning the present insights and assumptions through interpersonal interaction. At team level, collaboration and team learning have been defined. It refers to the spirit of working collaboratively towards a common goal. At organizational level, embedded system, empowerment, systems connection, and strategic leadership have been defined. Embedded system is establishment of systems to capture and share learning. Empowerment means involving everyone in the organization for the development of a shared vision. System connection represents the actions taken to connect the organization to internal and external environment. Strategic leadership shows how leader with strategic vision can help an organization sustain in dynamic market through the process of learning.

These three levels are further divided into two components, namely, people and structure. People constitute the organization, whereas, structure is created by an organization. Thus, learning organization has the capacity to integrate people and structures in order to move towards continuous learning. Organizations need to work with people at both the individual and team level. Learning is initiated at individual level, but social interaction facilitates learning at team level.

Thus, every organization exerts a lot of effort to engage employees in organizational learning. This is due to the ideological character of the learning process that develops certain barriers in transfer of learning, which results in conflict between individuals, teams, or organizations (Steiner, 1998; Valkenburg, Semetko, & De Vreese, 1999). Individuals practicing current behavior resist learning due to fear of losing social status, economic well-being, and psychological comfort. Other reasons that account for inhibition to individual learning can be negative attitude towards learning, lack of expertise, and fear of learning new things (Smolarczyk & Hauer, 2014). Also, individuals face certain hurdles while transferring the learning at the team level. The reasons accounted for this are personality differences, negative perceptions about the team, hidden agenda, fear of loss of ownership, and afraid of having inadequate knowledge, power, and politics (Yin-Tong Sun & Scott, 2005). Similarly, at the team level there are certain attitudinal problems within the team that hamper the transfer of learning from team to organizations. The barriers involved in transferring learning from teams to organizations are organizational culture, non-alignment of team learning with organizational assumptions and beliefs, and uncertainty if learning will be rewarded, recognized, criticized, or punished. Thus, the barriers of organizational climate, organizational relationships, systems, and structures are culture bound that hinders the transfer of learning from individuals to teams to organizations. Therefore, a supportive learning culture can facilitate transfer of learning in an organization.

Organizational amnesia is another type of barrier of organizational learning that hinders the transfer of learning at all the levels thereby hampering the adaptability and value creation (Othamn & Hashim, 2003). Organizational amnesia occurs due to two reasons: time and space (Kransdorf, 1998). If the past experience of people and organization's past achievements are not captured and stored, then with passage of time, the knowledge is lost or called organizational amnesia. Organizations would not be benefited from that knowledge. Even if knowledge has been captured, if its application is not clear then it has limited utility. In simple words, organizations forget past practices, solutions, and strategies that were once used. When organization is unable to disseminate tacit/explicit knowledge, it is slowly forgotten due to space-based constraints. Therefore, both time and pace can result in organizational amnesia, a barrier in transfer of learning process.

Thus, learning processes in organization requires destruction of barriers to learning

thereby expanding access to new sources of knowledge and experience (Starkey, 1996). Unless people believe that change is necessary and beneficial, there can be reluctance. Therefore, to motivate the individuals, emotionally intelligent resonant leaders are required who can guide them through shared vision, compassion, and overall positive mood (Goleman, Boyatzis, & McKee, 2013). Such a leader can encourage organizational members to take risk, initiative, and innovate; primarily known as intrapreneurship. For this reason an organic structure, trust, and open communication between all the levels are critical for an organization. Also, in today's knowledge economy, it is imperative that organizations and their members find ways to acquire, share, and apply new knowledge; a belief that is inherent characteristic of a learning organization. However, this knowledge can regularly be enhanced through task reflexivity. Leaders should focus on maintaining quality learning by creating an appropriate learning culture and policies (Nongmaithem, 2009). Therefore, leaders have responsibility for cognitive and behavioral reorientation of employees by guiding a new vision and encouraging them to justify and reflect on their assumptions, beliefs, and values through dialogue and inquiry, discussion, and social exchange. Thus, leader facilitates a process of learning, unlearning, and relearning (Cannon & Edmondson, 2005).

Focus of extant literature on learning has been on antecedents and consequences of learning, rather than identifying the enablers of learning that can help overcome the barriers in the learning process. The discipline of psychology and organization theory provides rationale supporting the process of learning in the organization to improve overall efficiency. The present research study fills the void in academic literature by identifying enablers of learning process at individual, team, and organizational level that can help an organization transform as a learning organization. The existing review of literature on learning organizations has been analyzed on the basis of period of publication, database, respondents, variables, sampling techniques, statistical techniques, type of study, data collection method, and countries, where the research has been conducted (Figure 2.1). Detailed review of literature of learning organizations has been explained through pictorial representation (Figure 2.2). Based on rational justification certain enablers of learning process have been identified as: resonant leadership, knowledge management, intrapreneurship, total quality management, and supportive learning culture that facilitate a learning organization, consequently resulting as an employer brand (Figure 2.3). The learning organization

attracts, develops, and retains potential talents. Such an initiative is not possible without the intervention of emotionally intelligent resonant leaders, who are proactive, visionary, and optimistic. In order to learn more about underlying the concept of learning organization, an extensive review of relevant literature has been cited. The detailed diagrammatic flow of literature on organizational learning has helped in identifying the major gaps in literature, which has developed motivation for the current study. These gaps are:

1. Barriers in transfer of learning from individual to team and organizational level: organizational amnesia, competency traps, and unlearning past practices.
2. Enablers of learning to develop a learning organization.
3. To develop a conceptual framework of learning organizations integrating all the variables at individual, team, and organizational level.

In order to bridge the gap in literature, certain variables have been identified as resonant leadership, intrapreneurship, knowledge management, total quality management, and supportive learning culture. Employer brand has been identified as a probable consequence of learning organization. An extensive review of literature on these variables has been presented in detail in Table 2.6.

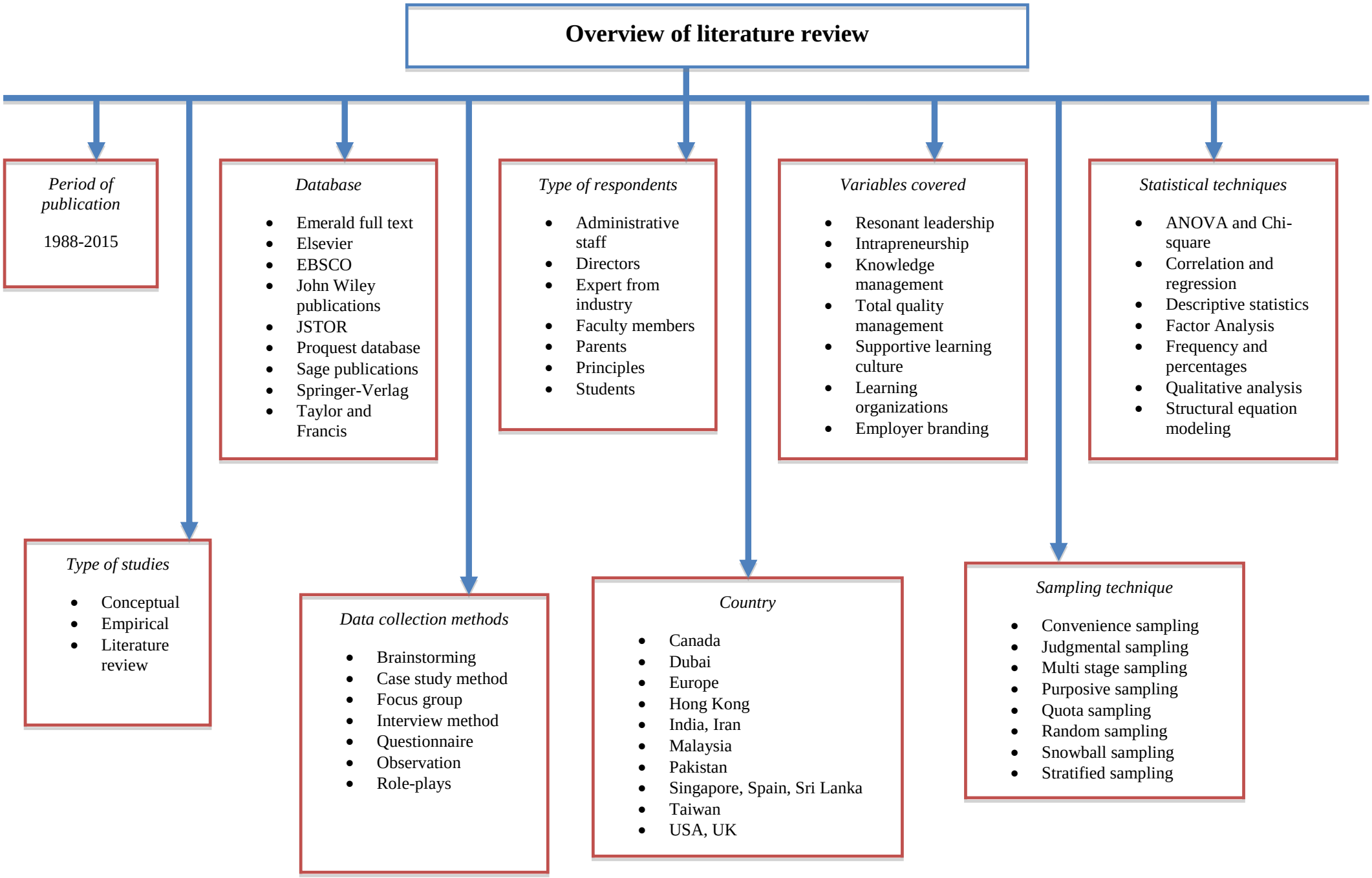

Figure 2.1: Overview of literature review

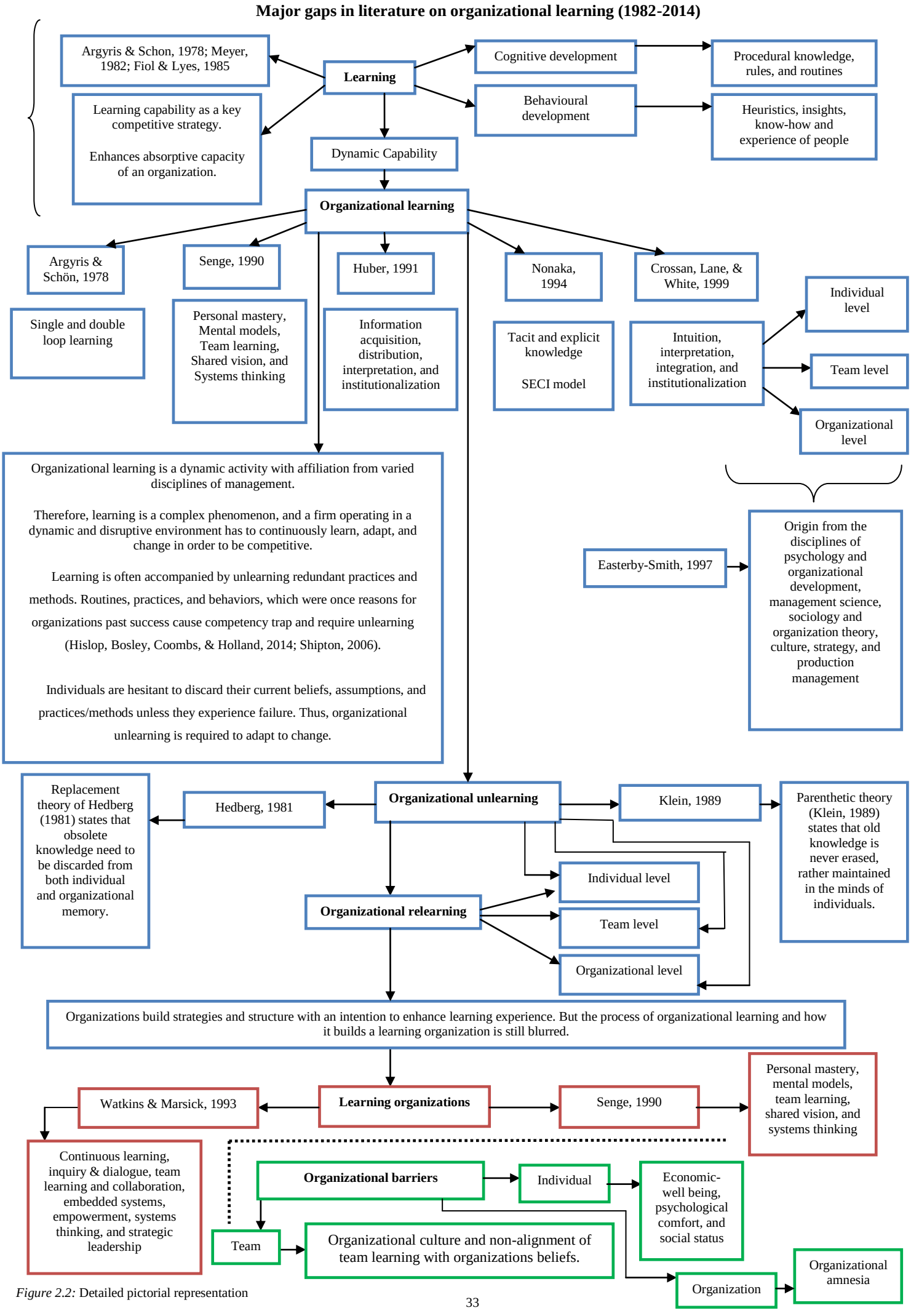

Figure 2.2: Detailed pictorial representation

Table 2.6: *Literature Review*

Author, year	*Objective*	*Findings*
Enablers of learning organizations		
Individual level variables		
1. Leadership		
Terziovski, Howell, Sohal, & Morrison, 2000	A multiple case study analysis was carried out in five Australian business organizations to establish relationship between TQM and learning organization.	TQM dimensions have been adopted from MBNQA model and learning organization dimensions have been adopted from Peter Senge's five disciplines. There is a inter dependence between TQM constructs and learning organization variables. Leadership is required for building shared vision, human resource development for team learning, and information analysis and process improvement for personal mastery and mental models respectively, and strategic planning and customer focus for systems thinking. TQM and learning organization results in enhanced communication, and participation of employees thereby improving organizational excellence.
Maccoby, 2003	The paper discusses the rules of a supervisor to improve teamwork with subordinates.	The six rules are clarifying purpose of task, roles and responsibilities, motivation, open communication, trust, and continuous and honest dialogue. These six rules also promote a learning culture. In a learning culture, people support each other, share experiences, and learn from mistakes.
Aksu & Özdemir, 2005	129 staff members in three five-star hotels in Antalya, Turkey were surveyed to investigate the factors of individual learning. Responses were analyzed using descriptive statistics, ANOVA, Scheffe test, and factor analysis.	Learning organizations are transparent and support individual's growth and improve continuously for effective change. Leaders behavior facilitates dialogue, teamwork, training and development, and performance based compensation to develop a learning culture.
Konidari & Abernot, 2006	244 teachers and 50 principals of secondary school in Greece were surveyed to see their transformation from TQM culture to learning organizations.	Educational institutions embrace learning to improve school accountability, efficiency, and quality. Higher student satisfaction is a result of higher teacher's motivation derived from their

	Responses were analyzed using descriptive analysis.	professional satisfaction and quality of services. The schools suffered from lack of shared vision, communication, receiving feedback, information sharing, evaluation process, staff participation, and poor community collaboration. Thus, emphasis was laid on reflective thinking, transformational leadership, and continuous training and development.
Retna & Tee, 2006	16 staff members in a Singapore school were interviewed to examine the transformation of schools as learning organizations.	Dimensions of learning organizations are distributive leadership, collaborative learning, open dialogue, experimentation and risk-taking, trust building, and withstanding resilience to produce effective results.
Chang & Sun, 2007	134 participants from 3 Taiwanese industries such as Financial insurance, manufacturing, and service were surveyed to investigate the role of leadership and organizational culture on employee's job satisfaction. Responses were analyzed using t-test, factor analysis, MANOVA, Scheffe test, and cluster analysis.	Transformational leadership style, bureaucratic control, and shared vision develop personal mastery and promote systematic cooperation. Transformational leadership style and organizational culture leads to employees job satisfaction as leaders motivate their subordinates and encourage open communication and information sharing to enhance learning.
Rijal, 2010	Senior executives and managerial personnel from four Indian and Nepalese Pharmaceutical industries were surveyed to investigate the impact of leadership style and organizational culture on learning organization. Responses were analyzed using t-test, Pearson's product moment correlation and step-wise multiple regression analysis.	Indian and Nepalese companies are high on collectivism and power distance, making directive leadership style more prominent in their organizations. Such leadership style creates barrier to learning in organization as directive leaders provide support and fail in providing flexible and adaptive culture of learning.
Chawla & Joshi, 2011a	57 top and middle level executives from 16 Indian companies were surveyed to study the impact of knowledge management on learning organizations across hierarchies. Responses were analyzed using descriptive statistics, regression analysis, t-test, and	Knowledge management processes, leadership, culture, and technology are required to create a platform for learning organizations. Leadership plays a significant role in defining roles and responsibilities, training and development, and reward and recognition. Culture promotes

	confirmatory factor analysis.	knowledge sharing through work practices, flow structure, and performance improvement process. Whereas Information technology facilitates knowledge sharing by consolidating information flow structure. Impact of hierarchies is negligible and thus employees at all levels have an access to information for knowledge creation thereby enhancing learning.
Huang, Rode, & Schroeder, 2011	Managers of 266 manufacturing plants in 3 industries from 9 countries were surveyed to investigate the effect of organizational structure, participative leadership style, and group culture on continuous improvement and learning. Responses were analyzed using descriptive statistics, CFA, correlations, and regression analysis.	Organic structure with flatness, low centralization, communication, employee involvement, and cross-functional teams promotes improvement and learning. Participative leadership style mediates the relationship between organizational structure and continuous improvement in learning. Such leaders encourage and motivate members in participative decision-making. Group culture with loyalty, belongings and teamwork among members fosters learning because of their increased communication and employee involvement in problem solving and decision-making process.
Gronhaug & Stone, 2012	The paper reviews literature to study the influence of climate on competitiveness.	Learning influences firm's internal climate. Earlier learning culture was defined by centralization, sustaining technology, independence, single-loop learning, linear thinking and adaptive knowledge Whereas new learning organizations have been characterized by decentralization, updated technologies, interdependence, systems thinking, generative knowledge.
Maden, 2012	The paper reviews literature to discuss the model of transforming public organizations into learning organizations.	Public organizations are those, which have a bureaucratic structure, hierarchal relationships bound by governmental policies and regulations and impede open communication. Learning climate consisting structure, culture and

		leadership promotes knowledge creation and builds capacity of organizational members. This knowledge can be stored in the organizational memory as documents and databases.
1 (a) Emotional Intelligence		
Tran, 1998	The paper reviews literature to discuss the role of emotional climate in a learning organization.	Emotional climate can be a power game, envy, despair, joy, pleasure, interest, and enthusiasm that affect the individual's emotion and those of others. Higher emotional climate in an organization results in idea generation, creativity, readiness and adaptability to learn, and change. People high on emotional intelligence are judicious decision-makers, work in teams, and contribute to effective team performance.
Leban & Zulauf, 2004	24 project managers in 6 organizations of US were surveyed to establish a link between emotional intelligence and transformational leadership style. Responses were analyzed using descriptive statistics.	Emotionally intelligent leaders tend to follow transformational leadership style that results in improved performance. These leaders have interpersonal skills, are accessible, decisive, determined, self-aware, influence and motivate the followers, and practice integrity. This encourages the workers to perform better thus achieving high job satisfaction.
Scott-Ladd & Chan, 2004	This paper develops a conceptual model of emotional intelligence, participative decision-making and organizational learning	Organizational learning promotes innovation and flexibility so that members adapt to environmental complexity. Emotional intelligent employees participate in decision-making process promoting organizational learning. Such people are confident, optimistic, innovative and flexible. People high on emotional intelligence have self-awareness, self-motivation and develop social and interpersonal relationships with fellow employees. They are more involved in the job, are satisfied and develop organizational commitment thereby reducing political behavior.
Chiva & Alegre, 2008	157 blue-collar workers from 8 ceramic tile industries in Spain were surveyed to identify the relationship between emotional	Organizational learning capability mediates the relationship between emotional intelligence and job satisfaction. Emotionally intelligent people

	intelligence and job satisfaction and verifying the role of organizational learning as a mediator. Responses were analyzed using confirmatory factor analysis.	are more satisfied under the organizational learning capability conditions because of flexibility, open communication, participative decision-making, risk taking, and experimentation.
Mustafa & Amjad, 2010	103 faculties from COMSATS institute of information technology were surveyed to explore the impact of emotional intelligence on work outcomes and attitudes. Responses were analyzed using MANOVA, correlation, and regression analysis.	Increase in the level of emotional intelligence increases teacher's learning ability thereby leading to greater job satisfaction, job involvement, job performance, career and organizational commitment, and decreasing turnover.
DeRoberto, 2011	90 principals from 15 public schools in New Jersey were surveyed to examine the relationship between the emotional intelligence of principals and schools as learning organizations. Responses were analyzed using stepwise multiple regression method.	Principal plays various roles such as servant leadership, community member, organizational architecture, social advocate, and educator. To execute such roles principal has to be a communicator, envisioner, facilitator, producer, and contributor. However the most challenging role of the principal is emotional intelligence. Higher emotional intelligence of principal can lead to building harmony, risk taking, information sharing, trust, healthier workforce, and better productivity thereby promoting job satisfaction and commitment. Such employees adapt to environmental changes. Therefore, emotional intelligence influences learning because employees are able to take risk and develop collaborative relationships and trust each other.
Labbaf, Ansari, & Masoudi, 2011	86 education officials and library assistants at Isfahan University in Iran were surveyed to explore the impact of emotional intelligence on the dimensions of learning organization. Responses were analyzed using regression analysis.	Emotional intelligence influences various dimensions of learning organizations such as mission and vision clarity, knowledge transfer, team building, and team problem solving. Employees know how to manage the relationship with fellow employees thereby developing learning capacity. Organizations also focus on developing emotionally intelligent employees as they outperform and build inter-group

		relationship, and contribute to organizational performance.
Landau & Meirovich, 2011	137 undergraduate school students at a state college in the northeast were surveyed to examine the role of emotional intelligence in a classroom.	Male students participate more in class discussions than females and students in a supportive climate learn to understand and regulate each other's emotions. Thus, emotional competency of an individual can be promoted through participative classroom discussions that result in academic achievement.
1 (b) Resonant leadership		
Cummings, 2006	17965 nurses were surveyed in 415 hospitals to explore the relationship between nursing practice environments and effects of hospital restructuring on nurses. Responses were analyzed using structural equation modeling.	Nurses who worked for emotionally intelligent resonant leaders reported positive health and well-being, and opportunities to provide quality patient care, Whereas, who worked for dissonant leaders reported greater negative effects of hospital restructuring.
Greengrove, 2008	This study qualitatively reviews literature by focusing on the importance of creating sustainable employee engagement strategies through focus groups and interview method.	Trust and resonant leadership skills are key to sustaining higher employees engagement level. Trust builds collaborative working relationship. Resonant leaders foster two-way communication and spread positive energy among the followers thereby leading to commitment and empowered workforce.
Klein, 2009	The paper reviews literature to contextualize the emotional intelligence skills with respect to team leadership and group dynamics.	A comfortable relationship between a leader and team members results in open and smooth communication that supports task achievement. Emotional intelligence skills play a major role on affective and cognitive development. When leader and team members bring both of these sides together, their performance rises. Maintenance of emotional harmony in the group is an important task as it spreads positive emotions and the group gains higher potential to

		achieve the desired outcome.
Squires, Tourangeau, Spence Laschinger, & Doran, 2010	A cross-sectional survey was conducted with 600 acute care registered nurses to examine the influence of resonant leadership on organizational justice, quality of nursing work environments, and nurse and patient outcomes. Responses were analyzed using structural equation modeling.	Resonant leadership significantly influences leader-nurse relationship, improves safety climates, supports professional environment, and lowers emotional exhaustion and job turnover.
Boyatzis, Passarelli, Koenig, Lowe, Mathew, Stoller, & Phillips, 2011	7 senior level executives, business owners, and second career faculty members from a major research hospital and research university were examined to assess the neural mechanisms involved in memories of interactions with resonant and dissonant leaders involving a functional scan using fMRI technology.	Employees neural circuits got activated when they were asked to recall moments spent with their resonant leaders. Employees revealed the positive state of mind when they worked closely with resonant leader. Such employees were found to be innovative and creative. Whereas, recalling the experiences with dissonant leaders negatively activated the neural areas.
Boyatzis, 2011	The paper qualitatively reviews about the neuroscience and leadership.	Inspiring and supportive relationships are important as they develop more social orientation towards others. An effective leader motivates followers to learn, adapt, and perform their best. Emotions are contagious and spread in milliseconds. Positive emotions activate the neural system that opens possibilities for individuals to learn and adapt. Negative emotions close these possibilities and inhibits learning.
Boyatzis, 2012	The paper qualitatively discusses the link between inspirational leadership and resonant relationships.	Inspirations aroused by resonant leaders encourage followers to exploit their talent and become innovative and creative thinkers. They put the person in a positive state of mind in which they build relationships and engage in open

		interactions.
Boyatzis & Soler, 2012	The paper qualitatively reviews the role of emotional and social intelligence in family business leaders leading to shared vision and increased success.	Visionary leadership, emotional intelligence, and resonance can encourage renewal in organizations. By building a resonant relationship, two family members inspired other members to form a shared vision among the various stakeholders in the family. Their positive emotions spread all around the organization making other members excited about this work.
Boyatzis, Smith, Van Oosten, & Woolford, 2013	The paper reviews literature to develop resonant leaders through emotional intelligence, vision, and coaching.	A resonant leadership programme highly characterized by emotional intelligence, vision, and coaching has greater impact on changing the person's behavior, in terms of emotional and social intelligence. Resonant leaders are emotionally intelligent who respond in kind and create a positive environment of open dialogue, mutual respect, and trust.
Taner & Aysen, 2013	The paper discusses the role of leaders and resonant leadership and the relationship of resonant leadership and organizational compassion.	Resonant leaders have mindfulness, hope, and compassion. Compassion is considered to be most important. It means being caring towards others. It constitutes noticing, feeling, and responding. Noticing means becoming aware of other's emotional state by being open and attentive. Feelings differ from person to person depending on the situation and conditions. Responding is the action taken towards easing other's pain. Resonant leaders have critical role in creating organizational compassion. However, organizational compassion may also create resonance among the leaders. But organizational climate, citizenship, and commitment influence this relationship, as they are important indicators of better performance.

2. Intrapreneurship		
Antoncic & Hisrich, 2003	The paper reviews literature to clarify the intrapreneurship concept.	Intrapreneurship is the initiative taken by the individuals for creating a new business within the organization The concept must be differentiated from other concepts such as diversification, capability, organizational learning, and organizational innovation. The eight dimensions of intrapreneurship have been recognized as new ventures and business, product/service and process innovation, self-renewal, risk-taking, proactiveness, and competitive aggressiveness.
Heinonen & Korvela, 2003	184 employees of 8 companies were surveyed to discuss the antecedents and consequences of intrapreneurship. Responses were analyzed using factor analysis and correlations.	The antecedents of intrapreneurship are management support, individual motivation, transparency, openness and communality, individual competence, enabling working environment, encouragement to innovate, and development. The outcomes that have been identified are appreciation of work and job satisfaction, perceived customer satisfaction, and external satisfaction in work.
Collins, Hannon, & Smith, 2004	1194 undergraduate fresher students from 3 universities in Leicestershire were surveyed to develop the capability of higher educational institutes to meet the entrepreneurial needs of the students. Responses were analyzed using descriptive statistics.	Higher educational institutions offer many types of entrepreneurial experience for students. They need to let students build on their experiences and develop knowledge and provide opportunities for further learning. They encourage students to take entrepreneurial challenge and develop their ideas by bringing them into market.
Garc´ıa-Morales, Llorens-Montes, & Verdu´-Jover, 2006	CEOs/consultants/academics from 480 Spanish organizations were surveyed to find the factors influencing organizational innovation and organizational learning that will further affect organizational performance. Responses were analyzed using correlations and multiple regression.	The factors that influence organizational innovation and organizational learning are personal mastery, transformational leadership, shared vision, and environment. Also, organizations that learn and innovate gain a greater strategic organizational capability thereby resulting in better organizational performance and

		sustained competitive advantage.
Molina & Callahan, 2007	The paper theoretically investigates how individual learning and intrapreneurship foster organizational learning that leads to organizational performance.	Intrapreneurship promotes new knowledge through innovation and risky decision-making. It spreads individual learning by facilitating the employees to challenge and question the long held traditions through creativity. Organizational learning improves organizational performance only if the organization is engaged in continuous learning process. Dynamic environment and human resource development also play an important role in creating new structures, technological opportunities, and stimulating change that fosters learning opportunities in the organization.
Antoncic, 2007	141 employees from Slovenian firms and 51 from US firms have been surveyed to find the antecedents and consequences of intrapreneurship. Responses were analyzed using structural equation modeling.	Antecedents of intrapreneurship are environmental and organizational characteristics. Environmental characteristics include dynamism, technological opportunities, industry growth, and demand for new products, unfavorable change, and competitive rivalry. Whereas organizational characteristics include communication, formal controls, environmental scanning, organizational support and competition, and person-related organizational values. Consequences of intrapreneurship are growth and profitability of an organization.
Franco & Haase, 2009	The paper reviews literature to study the interface between learning and entrepreneurship through a conceptual model.	Learning is an important factor for entrepreneurial activity that involves continuous learning process. Learning allows an entrepreneur to create and share knowledge and to search for new opportunities. The main components of entrepreneurial learning are intuiting and interpreting that are affected by internal and external motivation and alertness and creativity. Highly Intuitive person offers new possibilities to

		the organization through innovation. Interpretation gives shared meanings and understanding to the actions. Alertness and creativity help an entrepreneur to identify new opportunities thereby resulting in adaptability, improvisation, and innovation.
Molina & Callahan, 2009	The paper reviews literature to conceptually explore the relationship between individual learning, intrapreneurship, and organizational learning by creating a model that facilitates organizational performance.	Intrapreneurship facilitates organizational learning because employees who take the initiative continuously engage in the process of risk taking, experimentation, initiation, and innovation to improve organizational performance. These individuals challenge and question the stable systems by discovering new and improved ways of working and learning collaboratively.
Alipour, Idris, Ismali, Uli, & Karimi, 2011	The paper theoretically investigates the role of learning organization dimensions in intrapreneurship and organizational performance through a conceptual model.	Learning organization plays a significant role in creating intrapreneurship as it encourages the employee to involve in acquisition of skills, knowledge, habits, and attitudes. Intrapreneurship mediates the relationship between learning organization and organizational performance because it challenges and questions the traditional practices and innovate to improve organizational performance.
Alipour & Karimi, 2011	The paper theoretically investigates the moderating effect of organizational factors in the relationship between learning organization and intrapreneurship.	Organizational factors such as organizational structure, culture, management support, reward system, and resource availability act as moderators in the relationship between learning organization and intrapreneurship because they provide a flexible environment, positive values, and rewards such as money and promotions. All this motivates an individual to engage in continuous learning, risk taking, and experimentation thereby leading to intrapreneurship.

Keat, Selvarajah, & Meyer, 2011	417 respondents in 3 Malaysian Public universities were surveyed to investigate the relationship between entrepreneurship education and inclination towards entrepreneurship. Responses were analyzed using descriptive statistics, correlations, regressions, and factor analysis.	Two dimensions that play significant part in developing inclination towards entrepreneurship are university's role to promote entrepreneurship and entrepreneurship curriculum and courses. Universities provide entrepreneurially friendly environment in encouraging the entrepreneurial culture. Their curriculum matches the industry demands. Exposure to course of entrepreneurship will influence the students in developing such spirit in them.
Gradinaru, Boiciuc, & Constantin, 2012	3 focus groups have been conducted to study the importance of entrepreneurial spirit in universities.	Students prefer online media to the traditional ones because of its accessibility, low cost, and high volume. Student press magazine is appreciated because of diverse information provided. The Student Press magazine is the result of their entrepreneurial initiative. Such initiatives help students to develop positive attitude and entrepreneurial spirits. Educational institutes ensure that entrepreneurship courses and programs should form the curriculum of every program.
Tseng, 2013	The paper reviews literature to explore the relationship among self-directed learning and entrepreneurial learning and entrepreneurial performance consequently.	Entrepreneurial learning has two aspects of self-directed learning i.e. self-management and self-monitoring. Self-management involves management of learning resources whereas self-monitoring involves formation of knowledge by opportunity recognition. Self-directed learning motivates entrepreneurs to indulge in deep and meaningful learning processes: entrepreneurial networks, management of relationships, and entrepreneurial performance.
Bhatia & Khan,	The paper reviews literature to discuss the challenges of intrapreneurship in	Innovation is a part of corporate culture along with an effective reward system. Top

2013	organizations.	management is approachable to employees so that intrapreneurs can discuss their ideas and develop a system to scrutinize the new venture proposals that are profitable.
Bakar and Mahmood, 2014	246 academic leaders from 20 Public Malaysian universities were surveyed to study the relationship between transformational leadership, intrapreneurship, and performance. Responses were analyzed using descriptive statistics, t-test, regression analysis, and factor analysis.	Intrapreneurship partially mediated the relationship between transformational leadership and performance. Leaders motivate the employees to pursue new opportunities thereby inducing an intrapreneurial interest in the employees.
Team level variable		
3. Knowledge management		
Duffy, 1997	The paper proposes a model called 'knowledge work supervision' to redesign school system as a learning organization.	Supervisors believe that improvement of entire school system occurs due to change in attitudes and behavior of teachers. The model offers a systematic process for redesigning the school system. The 4-step life-cyclical model (preparing, redesigning, diffusion, and continuous improvement) is a never-ending process of organization renewal, which improves performance by combining organizational improvement methods with innovative ideas.
Baines, 1997	The paper reviews literature to study the relationship between knowledge management and learning organization.	Knowledge management and learning organizations are complimentary to each other. Knowledge management exploits the ability to learn and embrace learning as a part of continual improvement process. This result in improved decision-making and customer relations, increased worker independence, and offers better products and services.
Hong & Kuo, 1999	The paper reviews literature to study the knowledge management process in learning organizations.	Knowledge management enhances the organizational learning ability. A learning organization facilitates new knowledge, uses, and

		integrates external resources, combines knowledge in the form of documents; use incentives to increase knowledge growth, and transfer knowledge to other units. Knowledge management establishes a learning environment for employees to conduct learning practices, exchange, and share knowledge with clients and colleagues.
Loermans, 2002	The paper reviews literature to study the relationship between knowledge management and learning organization.	Knowledge management and learning across all levels are crucial for organizational long-term success. Learning organizations generates new knowledge and uses it efficiently and effectively to sustain competitive advantage. Knowledge management ensures proper generation and management of knowledge capital, which in turn facilitates learning. Thus, knowledge management and learning organizations are complimentary to each other and critical components for an organization's ability to learn and adapt.
Tippins, 2003	The paper reviews literature for mapping knowledge in academic settings.	Six steps for implementing knowledge management practices have been identified. These are: identification of existing knowledge and skills, focus groups, personal interviews, self-report survey, identification of relevant skills, and reconciliation of knowledge and skills according to industry norms. These steps are critical for developing knowledge management practices in the institutions.
Firestone & McElroy, 2004	The paper reviews literature to study the relationship between organizational learning and knowledge management.	Open knowledge management environment and easy access and availability of information leads to distribution of knowledge across all levels thereby increasing the ability to learn and forming high performance adaptive systems.
Cope, Cope III, & Folse, 2004	The paper reviews literature to study knowledge management issues in higher	Administrators and faculty are motivated to share knowledge to strengthen research ideas and create

	educational institutions.	a win-win situation. Certain barriers that hinder knowledge sharing process are lack of staff, information technology, leadership, and manipulation of data.
Walczak, 2005	The paper reviews literature to propose an organizational knowledge management structure.	Knowledge management involves developing a culture of sharing, utilizing, and creating knowledge. Knowledge management structure facilitates decision making through knowledge workers, teamwork, and horizontal knowledge transfer. This creates opportunities for embracing learning and maintaining communities of practice.
Cheng , 2009	5 mathematics teachers of Hong Kong primary school were observed and interviewed using an ethnographic approach to explore and enhance the teacher's professional development by creating communities of practice.	Communities of practice constitute a group of people interacting and sharing knowledge in their expertise area. Joint enterprise, mutual learning, and sharing repertoire of resources are the antecedents of communities of practice promoting long-term collaborative learning among teachers.
Lupşa-Tătaru, Constantin, & Doval, 2009	400 Romanian teaching staff and students have been surveyed to study the development of knowledge management processes in educational sector using McKinsey's model. Responses were analyzed using aleatory systematical techniques and aleatory techniques.	Various strengths of knowledge management processes found were strategy, shared values, and skills that are supported by organizational culture. This indicates the storage and utilization of knowledge. Whereas staff and style have been identified as the weaknesses and indicates lack of creating and sharing of knowledge.
Sohail & Daud, 2009	161 teachers from Malaysian public and private higher educational institutions were surveyed to examine the factors and barriers of knowledge management. Responses were analyzed using descriptive statistics, ANOVA, regression, and correlation.	Factors influencing knowledge sharing have been identified as working culture, motivation and opportunities to share, staff attitude, and nature of knowledge. Culture and nature of knowledge will result in increasing efficiency and improving work processes. Dedicated and committed staff is motivated to share knowledge. These opportunities are provided through better infrastructure and training programmes. Whereas, certain barriers found are individual,

		organizational, and technological. Individual barriers include lack of communication, time, trust, status, and social networks. Whereas organizational barriers include infrastructure, resources, physical environment, and meeting spaces. Technological barriers consist of difficulty in using technology based IT systems.
Arntzen, Worasinchai, & Ribie`re, 2009	The paper qualitatively reviews the application of knowledge management in Bangkok University.	Bangkok University is engaged in knowledge collaboration that facilitates communication through mobile, internet, meetings, and seminars among teachers and staff thus making them work more effectively. The university has started many international programmes and a knowledge centre having international professors that makes the knowledge sharing more challenging.
Adhikari, 2010	The paper qualitatively reviews the application of knowledge management in academic institutions.	Teachers are prepared for effective knowledge management practices to meet the needs of the students and society. Teaching, research, and technology, collaboration of institutes, networking, and sound teaching-learning environment are the perquisites for strengthening educational institutions. Whereas, certain barriers are lack of organizational efforts, organizational structure, motivation practices, knowledge based activities, and skills in using technology.
Chawla & Joshi, 2011b	51 respondents from Indian companies were surveyed to study the impact of knowledge management on learning organizations. Responses were analyzed using descriptive statistics, one-way ANOVA, and regression analysis.	Knowledge management has a greater impact on learning organizations in IT/ITES sector rather than manufacturing, power generation, and distribution sector. This is because IT/ITES are more knowledge intensive industries and thus are proactive in reexamining their resources and in adopting management practices. Such industries create, analyze, store, disseminate, and apply knowledge to facilitate a learning-oriented culture.
Van Grinsven &	The paper reviews literature to discuss the	Empowerment and knowledge conversion are

Visser, 2011	impact of empowerment and knowledge conversion on organizational learning.	found to be the antecedents of organizational learning. Empowered employees are more involved in accomplishing the task on immediate basis and defining goals and performance standards. Whereas knowledge conversion institutionalizes routines so that they can be used in future development tasks. Flexibility, open mindedness, and ability to change facilitate learning throughout the organization.
Brewer & Brewer, 2011	The paper reviews literature to discuss the linkage between knowledge management and human resource management in higher education.	Certain practices have been listed for effective knowledge management such as work design, orientation and socialization, selection and training, performance appraisal, reward and compensation, open and trusting culture, and information technology. Greater learning performances are derived from good human relations and better practices that are deployed into learning activities.
Motofei, Paunica, Matac, & Manole , 2011	The paper reviews literature to examine the development of learning culture for educational institutions in knowledge-driven economy.	Knowledge sharing is the ingredient of mutual learning and intellectual development of teachers and students. E-learning is a form of knowledge sharing that helps to generate ideas and discussions. There is a need to establish academic collaborative networks to foster creativity, large-scale participation, and openness.
Omerzel, Biloslavo, & Trnavcevc, 2011	82 respondents from 2 European educational institutions were surveyed to identify the relationship between knowledge management and organizational culture. Responses were analyzed using Pearson's correlation.	A culture of trust and sharing of knowledge is created so that higher educational institutions cater to the needs of international students as well. There is a positive relationship between organizational culture and knowledge management. The younger higher educational institute is more open to external environment because of outward and goal-oriented quality of employees than the old institute, which is more, well structured and formalized in terms of organizational expectations.

Bhusry & Ranjan, 2011	The paper qualitatively reviews the need of knowledge management in technical higher educational institutions in India.	Intellectual repositories are created to generate collection of knowledge to ensure quick availability of information. It is also updated and maintained with the addition of new knowledge. Knowledge acquisition can takes place in the form of teaching material, question banks, industrial interface, research projects, and case studies whereas input resources are faculty, professionals, researchers, and experts. This knowledge gets transformed into documents, databases, rules, tables, and graphs that are used by the stakeholders when required.
Sharma, 2012	200 teachers from Indian private engineering colleges were interviewed to study the knowledge management orientation. Responses were analyzed using factor analysis.	Leadership, organization culture, technology, knowledge acquisition, communities of practice, and knowledge dissemination are found to be the ingredients of knowledge management. Knowledge management fosters an innovative culture by creation and sharing of knowledge thus developing the centres of excellence.
Cheng, 2012	427 teachers in 15 aided secondary schools in Hong Kong were surveyed to identify the relationship between knowledge strategies and learning capacity. Responses were analyzed using exploratory factor analysis and structural equation modeling.	Interpersonal interactive sharing has been identified as the major knowledge strategy used in schools because teachers communicate through face-to-face. Knowledge retrieval, sharing, and utilization were identified as the predictive factors for individual and organizational learning capacity. Knowledge retrieval involves retrieving information from internet, intranet, seminars, and meetings that promotes organization communication. Knowledge sharing is done through discussion and collaboration. Knowledge utilization helps to apply knowledge in decision-making and problem solving process. Hence, community of practice as a knowledge strategy can be implemented to enhance learning capacity of schools and building it as a learning community.
Hannay, Jaafar, &	The paper presents a case study of 90	Knowledge management practices involve

Earl, 2013	principals and 144 teachers of 12 Canadian schools to examine the leadership practices promoting learning organization using knowledge management practices.	collaboration of knowledge workers, continuous learning, and revision of mental models. School's initiatives towards developing a new vision, restructuring cultural practices, active leadership, and collaborative dialogue practices facilitate social interaction among teachers. This results in a decentralized structure for an easy sharing of knowledge across and within schools.
Organizational level variables		
4. Total quality management		
Sohal & Morrison, 1995	The paper reviews literature to identify the impact of total quality management in building learning organizations in three Australian companies such as Toyota Motor, Corporation Deutscher, and Ramset Fasteners.	Total quality management serves as a vehicle for learning. The learning organization adapts to the ever-changing environment and continuously improves to create competitive advantage. Certain antecedents of learning organization are systematic problem solving, experimentation, learning from others, learning from past mistakes, and knowledge transfer. All these activities are highly practiced in these companies which indicates that total quality management is practiced in an environment where people continuously learn and share knowledge.
Thornett & Viggiani, 1996	The paper reviews literature to discuss the application of European Foundation for Quality Management model in creating Pen Y Dre school of South Wales as a learning organization.	School is trying to transform itself into a learning organization that requires employee involvement. By implementing European Foundation for Quality Management model, the school tries to improve examination results, self- esteem, and self-confidence of teachers and students to strengthen the future of the school.
Dervitsiotis, 1998	The paper reviews literature to explore the relationship among re-engineering, learning organizations, and TQM.	Re-engineering involves sudden dramatic improvements in performance through downsizing, delayering, and updated technology. A mutually reinforcing relationship has been found between learning organization and TQM for improving performance. Both TQM and learning organization complement each other by focusing on the systematic and self-renewing

		processes thus leading to long-term gains and improved competitive advantage.
Lagrosen, 1999	The paper develops a case study of four Swedish schools having total quality management practices to improve school quality.	Pupils, parents, society, and school personnel are identified as quality dimensions. Greater job satisfaction, open discussion, increased participation, cooperation between different departments, improved and active leadership, effective evaluation, and open communication at all levels are defined as the positive outcomes of the quality project undertaken. Whereas the negative outcomes were increase in workload, sense of insecurity, and lack of support from municipal school authorities.
Kanji, Tambi, & Wallace, 1999	60 Malaysian and 72 US institutes were surveyed to identify the application of TQM in higher educational institutes. Responses were analyzed using cross-tabulation, correlation, and frequency distribution.	Purpose of introducing TQM practices in Malaysia is to continuously improve the performance of educational sector. Whereas, US emphasizes on communication, decision-making, planning, meeting industry requirements, benchmarking, and student retention and participation. US institutes are more mature than Malaysian institutes as they emphasize on customer-orientation and Malaysian institutes focus on improving financial performance. Leadership is the most important factor in TQM as it emphasizes on employee motivation. Quality circles are implemented in Malaysia rather than US because of lack of commitment of members.
Mergen, Grant, & Widrick, 2000	The paper reviews literature to apply various dimensions of quality as given by Gitlow, Oppenheim, and Oppenheim in Rochester Institute of technology's college of business.	The problems faced by the institutions were poor research, declining student's enrollment, and their attrition. Quality management practices were adopted to improve research and teaching. The faculty and staff were continuously trained to enhance their competency. The role of quality dimension such as quality design, quality conformance, and quality performance on school's mission is identified. Quality design is associated with the feature of a product. Quality

		conformance deals with the agreement of firm's and suppliers cost requirements. Quality performance deals with the performance of the product in the market. Such an initiative has improved school registration process, industry-college collaboration, salary of staff and their teaching and research, student retention, effectiveness in teaching, and placement of graduates.
Dimitriades, 2000	The paper conceptually reviews the concept of total involvement in quality management.	Total involvement is an integrated concept involving everyone in the organization. Traditional involvement focused on increase in productivity and profit but total quality involvement focuses on internal and external customer satisfaction. Teamwork also plays a key role in implementing TQM as everyone works collaboratively to solve specific quality problems faced by an organization.
Chen, Sok, & Sok, 2007	324 teachers and students at five Cambodian University and 168 teachers and students at Shu-Te University were surveyed to benchmark the factors promoting quality in higher educational institutes. Responses were analyzed using descriptive statistical methods.	Quality in higher education encompasses course curriculum, qualification of teachers, funding by government, modern facilities, and networking. Cambodian education system is weaker than Shu-Te University with respect to implementation of quality because of extra-curricular activities, lack of motivated teachers, poor teaching and research methods, and non-availability of modern facilities. Cambodian Universities are more teaching-oriented whereas Shu-Te University is research focused and maintains standards by providing modern aids to improve quality.
Lam, Poon, & Chin, 2008	Employees at vocational training council of Hong Kong were interviewed to identify the role of TQM culture and organizational learning. Responses were analyzed using correlation and regression analysis.	Educational institutions apply TQM dimensions to facilitate learning. TQM influences organizational learning as continuous improvement helps to create a learning organization. Shared vision, long-term focus, teacher involvement, systems-approach, and participative decision-making are parameters of

		TQM. Improvement and learning takes place when members work in a team towards a shared goal. Rule-oriented culture hampers the creation of TQM. TQM flourishes in a flexible organization that supports experimentation and risk taking.
Kukemelk, Lillemaa, & Tondi, 2011	2125 teachers at Estonian schools were surveyed to assess their involvement in quality improvement programme using European Foundation for Quality Management excellence model. Responses were analyzed using descriptive statistics.	Teachers are key players for promoting quality management system in schools. They constructively contribute in strategic planning process, budgeting, personnel development, and motivation of students for high academic achievement. Teachers at Estonian schools are not involved in management and administrative activity of school. The school leadership involves them in school improvement activities thereby improving overall academic performance quality.
Vatankhah, Pakdel, Noruzi, Mahmudi, & Vatankhah, 2011	378 faculty members of Islamic Azad University in Iran were surveyed to analyze the transformation of higher education institutes as learning organizations. Responses were analyzed using Pearson's correlation coefficient, regression, Kruskal-wallis test, and ANOVA.	Parameters of learning organization are leadership, shared vision, teamwork, knowledge transfer, and experimentation. Whereas, parameters of academic quality improvement programme understand stakeholder's needs, valuing people, communication, supporting institutional operations, measuring effectiveness, continuous improvement, and collaborative relationships. Academic quality improvement programme initiatives help in developing learning organizations as they emphasize on continuous improvement of every activity in the institute. Leadership didn't confirm the relationship with academic quality improvement programme because of lack of information, staff awareness, innovative teamwork, and flexibility.
Srihawong, Srisa-Ard, & Chiwpimai, 2012	Quantitative study of 145 personnel at Sisaket Rajabhat University in Thailand was conducted to determine the factors of learning organization. Responses were analyzed using content analysis and	Quality of information, flexible organization structure, shared vision, motivation, learning culture, teamwork, and supportive leadership help in maintaining quality in organizations to promote learning.

	descriptive statistics.	
Lagrosen & Lagrosen, 2012	229 teachers of 20 primary schools in southwestern Sweden were surveyed using quality management values and health index questionnaire to investigate the inter relationship among quality management, employee health, and organizational learning. Responses were analyzed using Pearson's correlation test.	School Quality depends on health status of an employee. A healthy person is more committed and confident in work. Empathy, open communication, reliability, long tenure, and workplace learning enhance employee's health and well-being.
Sabet, Saleki, Roumi, & Dezfoulian, 2012	The paper reviews literature to determine the factors influencing TQM in educational industry.	Staff training, culture of commitment, decentralization, effective feedback, funding, reward system, open communication, teamwork, and job involvement promote TQM in schools. These factors further promote employees involvement in building their capabilities to work effectively and efficiently.
Malik & Blumenfeld, 2012	41 Indian respondents working in 4 BPO firms in National Capital Region and Mumbai were surveyed to study the impact of six sigma and TQM on organizational learning capability. Responses were analyzed through semi-structured interview method.	Learning organization parameters are commitment to learning, open-mindedness, and shared vision. Whereas Six sigma and TQM parameters are commitment to quality, information sharing, continuous improvement, and team working. Six sigma and TQM enhances the organizational learning capability. Organizational commitment towards quality and information sharing promotes learning because quality of the project will help firms focus on learning and knowledge sharing. Whereas continuous improvement is a critical factor in commitment to learning and open-mindedness because new information is received from internal and external forces. An emphasis is laid on allocation of resources for learning and development. Teamwork is found to be associated with shared vision because working collaboratively helps in gaining learning and commitment from employees.

4 (b) Task Reflexivity

De Dreu, 2002	215 individuals in 32 teams of a private company were surveyed to study the influence of minority dissent and reflexivity on team innovation and its impact on team effectiveness.	Higher team reflexivity and minority dissent showed more innovation and greater team effectiveness because of high levels of participative decision-making and thus minority voice is heard that leads to creative and divergent thinking.
Tjosvold, Tang, & West, 2004	200 employees in 100 work teams in China were surveyed to study the antecedents and consequences of task reflexivity. Responses were analyzed using correlations and SEM through EQS software.	Teams with cooperative and interdependent goals engage in higher levels of task reflexivity because members are able to discuss the disruptive issues openly and constructively. Their interaction promotes mutual goals that help them to discuss issues for mutual benefit thereby leading to innovation. Whereas, teams with competitive goals engage in lower levels of task reflexivity because it reduces open-minded discussion as members try to compete with each other by working towards their independent goals.
Hoegl & Parboteeah, 2006	575 members, leaders, and team members from 145 German software development teams were surveyed to study the impact of team reflexivity on its effectiveness and efficiency. Responses were analyzed using descriptive statistics, correlation and regression analysis.	Team reflexivity is positively related to team effectiveness because reflecting on the way work has been done induces better communication through information sharing. Whereas team reflexivity is negatively related to team efficiency because it will have an implication on time and cost factor and many a times re-work has to be done. Also, social skills and project management skills are positively related to team reflexivity because it indicates team member's ability to deal with criticisms, planning, and questioning.
Dreu, 2007	46 employees of management and cross-functional teams of a private company in Netherlands were surveyed to investigate the relationship between perceived cooperative outcome and team reflexivity to predict information sharing. Responses	Cooperative outcome interdependence is related to information sharing, learning and team effectiveness when task reflexivity is high because members are able to discuss the disruptive issues openly and constructively. Their interaction promotes mutual goals that help

	were analyzed using descriptive statistics, correlation, and regression analysis.	them to discuss issues for mutual benefit. Also, learning mediated the interaction between cooperative outcome interdependence and task reflexivity on team effectiveness because members are engaged in systematic processing of information and make better decisions.
Widmer, Schippers, & West, 2009	The paper reviews literature to identify the antecedents and consequences of reflexivity.	The antecedents of reflexivity are trust, psychological safety, shared vision, diversity, and leadership style. The consequences of reflexivity are innovation, effectiveness, and creativity.
Schippers, West, & Dawson, 2012	98 primary health care teams in U.K. were surveyed to study the impact of team reflexivity on innovation. Responses were analyzed using descriptive statistics, correlations, and regression analysis.	Team reflexivity was positively related to team innovation because members questioning on the ways of working and ideas produced can make their work more effective. High Team reflexivity if moderated by high work demands also shows higher innovation because of the development of improved ways of working. Also, high team reflexivity if moderated by low physical work environment results in higher innovation.
5. Supportive learning culture		
Calabrese & Shoho, 2000	This paper qualitatively reviews educational programs contribution towards learning organization.	Mutual cooperation of operator, engineering, and executive culture results in open interactions and adaptive organization structure thereby generating a learning culture.
Pool, 2000	307 graduates of Business school of Ashland University in Ohio were surveyed to investigate the inter-relationship among TQM, learning organization, culture, and employee's motivation. Responses were analyzed using confirmatory factor analysis and EQS software.	Supportive organizational culture and total quality management are found to be essential for developing a learning organization. Supportive culture fosters challenging tasks, open communication, trust, innovation, and group cohesion. Whereas, TQM facilitates teamwork, systematic approach, flexibility, adaptability, and ability to promote learning among individuals.
Coppieters, 2005	The paper describes the process of transformation of schools as learning	Schools play a significant role in developing a sustainable competitive advantage in a dynamic

	organizations.	environment. School Effectiveness, Improvement and Culture (SEIC) shows involvement of schools in building learning organizations. However, this perception doesn't hold true in dynamic environment. Information flow, quality of information, delegation of responsibilities, effective decision-making and collaboration has been identified as enablers of schools performance in a highly dynamic environment.
Jamali & Sidani, 2008	57 Lebanese organizations were surveyed to assess their performance on dimensions of learning organization. Responses were analyzed using factor analysis.	Employee empowerment, learning climate, employee development, experimentation, and reward system are characteristics of effective learning organizations Employee participation has been identified as the strength of Lebanese organizations indicating that employees are treated as assets and their views and suggestions are valued. Experimentation has poor contribution towards learning organization as less attention was given to exploration of new ideas and risk-taking initiatives.
Lucas & Kline, 2008	Employees working in fire services and emergency medical service were observed and interviewed to identify the role of organization culture and group dynamics on organizational learning and change.	Firefighters have para militaristic culture with steep hierarchy, authority and responsibility, and more rigidity inhibiting change. Whereas, emergency medical services have a supportive culture with flat structure and low hierarchy that encourages questioning routines and procedures that fosters learning at all levels. Group members possessing high status are more influential than those with lower status as they dominate other members through position and authority.
Dai, Duserick, & Rummel, 2009	The paper qualitatively reviews literature to examine creation of a learning culture for competitive advantage.	Learning culture provides a platform for problem oriented learning programs. It is a catalyst for an organization to face unique challenges caused in the hostile environment. It promotes continuous learning in the organization that ensures a sustainable competitive advantage because learning is unlikely to be imitated by the

		competitors.
Small & Minkes, 2010	Employees at higher educational institutes, an army unit, and an aviation safety were surveyed to know their development as a learning organization. Responses were analyzed through semi-structured interviews.	Australian organizations are specialized in the areas of staff learning and development, adaptation, continuous learning, quality enhancement, and improvement in teaching and learning quality. In Indonesian university diverse cultures such as Catholic, Dutch, and Japanese existed that hampers innovation because of lack of innovative and creative people. Whereas, In the army unit, experiential collaborative learning, staff training and development, and innovation is highly practiced. The aviation safety organization had a bureaucratic structure that hinders learning.
Johnson, 2010	Administrators, faculty members, and staff of 24 colleges were surveyed to explore the presence of sub-groups in higher educational institutes. Responses were analyzed using Bohemian dialogue.	Higher educational institutes have three levels of operator, engineering, and executive that build culture in the organization. These three sub groups having their respective mission, vision, and functions operate differently. Inter group interaction between them leads to open communication, better decision-making, clarity of roles and action reflection learning.
Raza, Murad, & Kayani, 2010	150 MBA students of a Lahore Business school were surveyed to explore their perceptions about the role of a learning climate. Responses were analyzed using factor analysis and cluster analysis.	Learning is promoted through shared collaboration, cooperation, and interaction between teachers and students. It has been identified that students found school culture and trust of stakeholders necessary for learning to occur because culture encourages them to share their views openly and be socially responsible.
Schechter & Feldman, 2010	26 faculty members at The Shalom special education school of Israel were interviewed to identify the factors constituting learning organization and learning values through a case study.	Information processing and structural and cultural facets consist of organizational learning. Information processing happens during teacher's class meetings, level-wise meetings, monthly meetings, and pedagogical meetings. Meetings promote learning and knowledge sharing because members expose their thoughts in an open

		dialogue conversation. Small class size, clarity of thoughts, and teacher-staff collaboration constitutes the learning values of special education school. Initiating the reculturing process can foster a more productive learning environment where teachers can become continuous learners by working collaboratively with each other thereby developing a culture of trust and accountability.
Harrison, 2011	Qualitative study of 5 HR professionals, 5 managers, and 600 HRM/HRD practitioners was undertaken to study role of line management in learning culture.	Line management works with employees and is engaged in the process of informal and formal feedback to suggest different ways of developing knowledge. Whereas, learning culture encourages knowledge sharing using informal means that helps in the development of personnel competence.
Pantouvakis & Bouranta, 2013	437 front line employees and supervisors of port, supermarket, and automobile repair service were surveyed to identify the impact of employee job satisfaction and organizational learning culture on customer service. Responses were analyzed using moderated mediation analysis and regression analysis.	Supportive organizational culture with open communication, employee participation, and involvement and constructive feedback system promotes learning. Such employees develop their competencies to benefit organizations.
5 (a) Organic structure		
Patterson, 1999	The paper reviews literature to examine the universities adopting cross-sectoral alliances to promote learning.	Collaboration of universities results in cost-efficiency ranges of qualification, varied fields of study, and opportunities to develop teaching, research, and course material.
Örtenblad, 2004	The paper develops a conceptual model of learning organizations through review of extant literature.	Organizational learning, learning at work, learning climate, and learning structure constitute the learning organization. Risk-taking and experimentation and learning from failure promote workplace learning. Norms, routines, and values constitute learning climate. Flat and

		decentralized structure constitutes learning structure stimulating knowledge sharing. The acquired knowledge is stored in organizational memory with new rules and routines facilitating overall learning.
Lam, 2005	1330 teachers from 29 Hong Kong secondary schools were surveyed to study the impact of organizational structure on student teacher learning. Responses were analyzed using principal component factor analysis, one-way ANOVA, and path analysis.	Flexible structure with autonomy favour student teacher learning thereby motivating teachers. Such a structure provides teacher's control over instructional practices and facilitates mutual learning and knowledge sharing thereby enhancing student academic performance.
Harris & Van Tassell, 2005	The paper reviews literature on learning organization in professional development schools.	Professional development schools are innovative institutions formed by the collaboration of school and university. Such collaboration enhances student achievement, staff training and development, promotes quality teachers through dialogue and inquiry. It facilitates experimentation, risk-taking, openness to ideas, and improvement in teaching, and high-order thinking to promote learning organization.
Randeree, 2006	The paper develops conceptual framework to identify the role of structural dimensions in transforming schools as learning organizations using a conceptual model.	Learning organizations have open and flat structures. In order to develop school as learning organization structural reforms are made through collaboration of teachers. The existing culture, mission and vision, policies, procedures, physical dimensions, and teachers might create a barrier to learning. Therefore, structural reforms have to be followed by change in culture.
Keung, 2008	388 teachers in 20 aided secondary schools of Hong Kong were surveyed to examine the effect of school management practices on teacher's participation in decision-making. Responses were analyzed using structure equation modeling.	Teacher's involvement in pedagogy development and decision-making varies based on management practices. Management practices can be bureaucratic or organic. Teachers show more involvement in pedagogy and instructional material development. Higher the level of management control, lower is the participation of

		teachers in decision-making. Therefore, schools having flatter structures encourage teacher's participation in learning.
5 (b) Open communication		
Barker & Camarata, 1998	The paper reviews literature to discuss the role of communication in creating and maintaining learning organizations.	Communication in the context of dissemination and shared interpretation of information forms an integral part of building a learning organization. Individuals interact on the basis of rational choice and social exchange. In rational choice theory, the choice is rational, economic, and based on exchange relationship. Whereas, social exchange theory focuses is on welfare of others. Also, mutual cooperation is achieved through trust, commitment, and perceived organizational support resulting in better organization-employee relationship, and employee empowerment.
Saari & Talja, 2009	The paper reviews literature to build a communication and learning based leadership model for top management and knowledge workers in Finnish public research organizations.	Learning and communication are integral part of knowledge organizations. Dialogue, discussion, and generation of new ideas form a vital part of knowledge organization.
5 (c)Trust		
McAllister, 1995	194 managers and professionals in Southern California were surveyed to study the relationships of interpersonal trust among them. Responses were analyzed using SEM through Lisrel.	Trust can be affective and cognitive. Affective trust is developed through emotional bonding, whereas cognitive trust develops due to individual's competence, and knowledge, Antecedents of affective trust are citizenship behavior and interaction frequency. Antecedents of cognitive trust are peer reliable role performance, cultural-ethnic similarity, and professional credentials. Higher level of affective trust, higher would be the citizenship behavior that will lead to increased performance of peer.
Mayer, Davis, & Schoorman, 2000	General managers of 9 restaurant chains were surveyed to study the relationship between trust, organizational effectiveness, and organizational performance.	A positive relationship has been found between trust and organizational effectiveness in terms of higher net sales, profits, and low employee turnover. General Managers trust and employee's

	Responses were analyzed using descriptive statistics, correlations, and regression.	perceptions of the GM's ability, benevolence and integrity are also significantly related. A positive relationship has been found to exist between trust and organizational performance.
Levin & Cross, 2004	42 employees in American pharmaceutical company, 41 in British bank, and 44 in Canadian oil and gas company were surveyed to study the effect of trust mediating the relationship between stronger/weaker ties and knowledge transfer. Responses were analyzed using descriptive statistics, correlations, regression, and SEM.	Stronger ties have a positive relationship with knowledge transfer than weak ties. Strong ties were associated with benevolence and competence based trust. Weak ties are structurally beneficial because they have non-redundant information. Knowledge receiver is likely to trust the competence of the source when knowledge transfer involves tacit knowledge rather than codified knowledge.
Morrow, Hansen, & Pearson, 2004	2819 members of a farmer-owned marketing cooperative in US were surveyed to study the relationship between trust and performance. Responses were analyzed using descriptive statistics and correlations.	A positive relationship has been found to exist between trust and organizational performance. Higher the trust, higher will be the participation, and higher will be the organizational performance.
Mayer & Gavin, 2005	247 employees in 8 manufacturing plants in US were surveyed to study the relationship between trust in management and individual performance. Responses were analyzed using descriptive statistics and correlations.	Employees who are vulnerable to management are focus on activities that add value to the organization thereby contributing to the in-role than extra-role. Greater exposure to top management will result in building trust and improving performance. Therefore, trust in an organization will promote extra work by employees.
Renzl, 2005	201 employees from utility sector and software consulting industry were surveyed to study the mediating effect of fear of losing one's unique value and knowledge documentation on the relationship between trust in management and knowledge sharing. Responses were	In a trusting and favorable environment where there is no fear of losing one's position, individuals are more willing to documents knowledge thereby leading to more interaction and knowledge sharing.

	analyzed using correlation and SEM.	
Lobo & Dolke, 2012	147 managers in India were surveyed to examine the relationship between interpersonal trust and organizational learning capability. Responses were analyzed using canonical correlations.	Interpersonal trust is crucial for knowledge acquisition, sharing, and utilization at the organizational and coworker level that facilitates organizational learning capability.
Swift & Hwang, 2013	157 marketing and sales executives of customer-oriented companies were surveyed to examine the role of trust in promoting knowledge sharing and establishing a learning environment. Responses were analyzed using correlations.	Knowledge sharing occurs in atmosphere that imbibes trust and openness. Trust consists of affective and cognitive components. Affective trust favors knowledge sharing and social networking because of employee's emotional inclination for their fellow beings thereby promoting more interaction. Whereas, cognitive trust has a positive relationship with organizational culture because more formalization facilitates achievement of organizational goals.
Consequence of learning organization		
1. Employer branding		
Backhaus & Tikoo, 2004	The paper reviews literature to discuss the relationship between employer branding and organizational career management.	Employer branding creates brand association and brand loyalty. Employer brand association impacts employer image to affect attractiveness of the organization for prospective employees. Employer branding impacts organization culture and organization identity that results in brand loyalty, which leads to increasing employee productivity. It provides a support for organizational career management program by offering advancement, variety of work, and good relationship among workers.
Egan, Yang, & Bartlett, 2004	245 employees from 13 IT firms in US were surveyed to investigate the relationship between organizational learning culture, job satisfaction,	Organizational learning culture has a significant relationship with job satisfaction and motivation to transfer learning and has an indirect effect on employee's turnover intention. Whereas a

	motivation to transfer learning, and turnover intentions. Responses were analyzed using descriptive statistics, correlations, and SEM.	positive but non-significant relationship has been found between job satisfaction and employee turnover intention.
Boyd & Sutherland, 2006	51 respondents were interviewed to determine the factors of employee commitment to living the brand of the organization.	Critical factors of employer branding are clear communication, employee loyalty, monitoring company's culture and integrating measurement criteria, and performance management system. Non-critical factors include meeting the individual needs, offering financial rewards, job satisfaction, and employee involvement in development of employer branding.
Sullivan, 2008	The paper explains the benefits of employer branding.	Benefits of employer branding are quality candidates, higher offer-acceptance rates, increased employee referrals, employee-retention rates, employee motivation, shareholder value, strong corporate culture, manager satisfaction, media exposure, competitive advantage, and quality products.
Moroko & Uncles, 2008	17 in-depth interviews with 13 senior industry participants were carried out to identify the characteristics of successful employer brands.	The characteristics identified are brand awareness, differentiation from competitors, relevant and resonant brand, promised psychological contract, and appropriate brand values.
Bhatnagar & Srivastava, 2008	Qualitative study of 20 employees of pharmaceutical organization in National Capital Region, India was carried out through a case study to investigate the process of developing effective employer brand.	For developing an effective employer brand company resorts to good internal communication strategy, training and development programmes, friendly organizational culture, helpful and flexible HR department, well-maintained relationship with vendors, strong advertising strategy, HR strategy for campus recruitment, and

		employee referral program.
King & Grace, 2008	10 employees of service sector were interviewed to explore employee's perception of their organization's brand.	To carry roles and responsibilities, employees acquire organizational knowledge through training, customer/market information, and work environment with co-workers. Critical success factors include support, communication, positive work environment, acknowledgement, articulation of vision, and organizational information.
Agrawal & Swaroop, 2009	125 students from 5 universities across India were surveyed to study the effect of employer brand image on application intentions of B-School undergraduates. Responses were analyzed using descriptive statistics and correlation analysis.	Strong employer branding has a positive influence on application intentions of students, as students want to be associated with the prestigious university to build up their self-image. Students are more interested for applying in organizations that offers challenging assignments, empowerment, autonomy, and responsibility even if they are offered lower wages.
Edwards, 2010	The paper reviews literature to discuss the concept of employer branding.	Employer branding activities will be most effective through advertising campaigns, positive image, organizational identity, open communication, support for employees, unique psychological contract, and providing instrumental and symbolic attributes.
Ong, 2011	Qualitative study has been carried out to study the influence of employer branding on potential job applicants.	The attributes of a brand are instrumental and symbolic. Instrumental includes pay, location, career programs and opportunities for advancement. Whereas symbolic includes innovativeness, competence, prestige, and excitement. Employees assess instrumental attributes more than symbolic attributes when applying for the job because they take decision

		rationally and not emotionally.
Love & Singh, 2011	Qualitative study has been carried out to study the concept of workplace branding.	Best practice of human resources is to develop an organization as a strong workplace brand through inspired leadership, strategic planning, communication, performance management, training and development, physical workspace, benefits, and corporate citizenship.
Kucherov & Zavyalova, 2011	113 UK companies and 70 students of 2 Russian universities were surveyed to identify the features of HRD practices and talent management in strong employer brand companies and to determine the role of employer brand in attracting the talent.	HRD practices of strong employer brands are goal setting, decision-making, HR training, management, performance appraisal, HRD activities, and organizational values. Advantages of having a strong employer brand are lower turnover rates, higher rates of investments in training and development, improved labour relations, and strong organization culture.
Lydeka, Bendaravičienė, Krištolaitis, & Bakanauskienė, 2011	Qualitative study has been carried out to identify the dimensions of employer's attractiveness in University.	12 dimensions of employer branding identified are strategic management, teaching environment, work/life balance, organizational culture, job satisfaction, working conditions, trustworthiness, teamwork, supervisor relationship, training and development, and compensation and benefits.
Pingle & Sodhi, 2011	150 current and 150 potential employees were surveyed to study the factors of attractive employer. Responses were analyzed using informal interviews and factor analysis.	Factors that make an employer attractive are relationship, recognition altruistic value, location, learning and development, application, interest, corporate social responsibility, global opportunities, existing personal contacts, and economic value. Potential employees give more importance to global opportunities, economic value, personal contacts, and corporate social responsibility. Whereas healthy relationship with colleagues, recognition from superiors, and

		interest are more important to current employees as they are well-established and satisfied with the working conditions of the organization.
Yaqub & Khan, 2011	100 students from 3 universities of Rawalpindi and Islamabad were interviewed to investigate the relationship of employer branding and talent management on organizational attractiveness. Responses were analyzed using descriptive statistics and correlation analysis.	Employer branding and talent management have a positive influence on organizational attractiveness. Students want to join prestigious institution featured with friendly and informal culture. Students are more inclined towards visit to job fairs, seminars, and calling sponsored speakers on campus. Universities having these practices have positive effects on employee's retention rate.
Anitha & Kumar, 2012	188 final year students from 5 MBA colleges in Coimbatore were surveyed to study the impact of employee's personality characteristics on employer attractiveness. Responses were analyzed using correlation and regression analysis.	There is a significant relationship between characteristics of person and employer attractiveness. Employees apply in those organizations where the potential benefits are most attractive. A conscientious personality is attracted towards an organization where interest, development, economic, and application factors are valued the most. An openness personality trait is attracted towards interest, development, and application value. The agreeableness personality trait is influenced by development and application values provided by employers. The neurotic personality is influenced by application value and extraversion trait is attracted towards social value dimension of employer.

(Source: Abovementioned respective research papers)

Discussing in details about enablers of learning, we develop a conceptual framework of learning organization and its consequences (Figure 2.3).

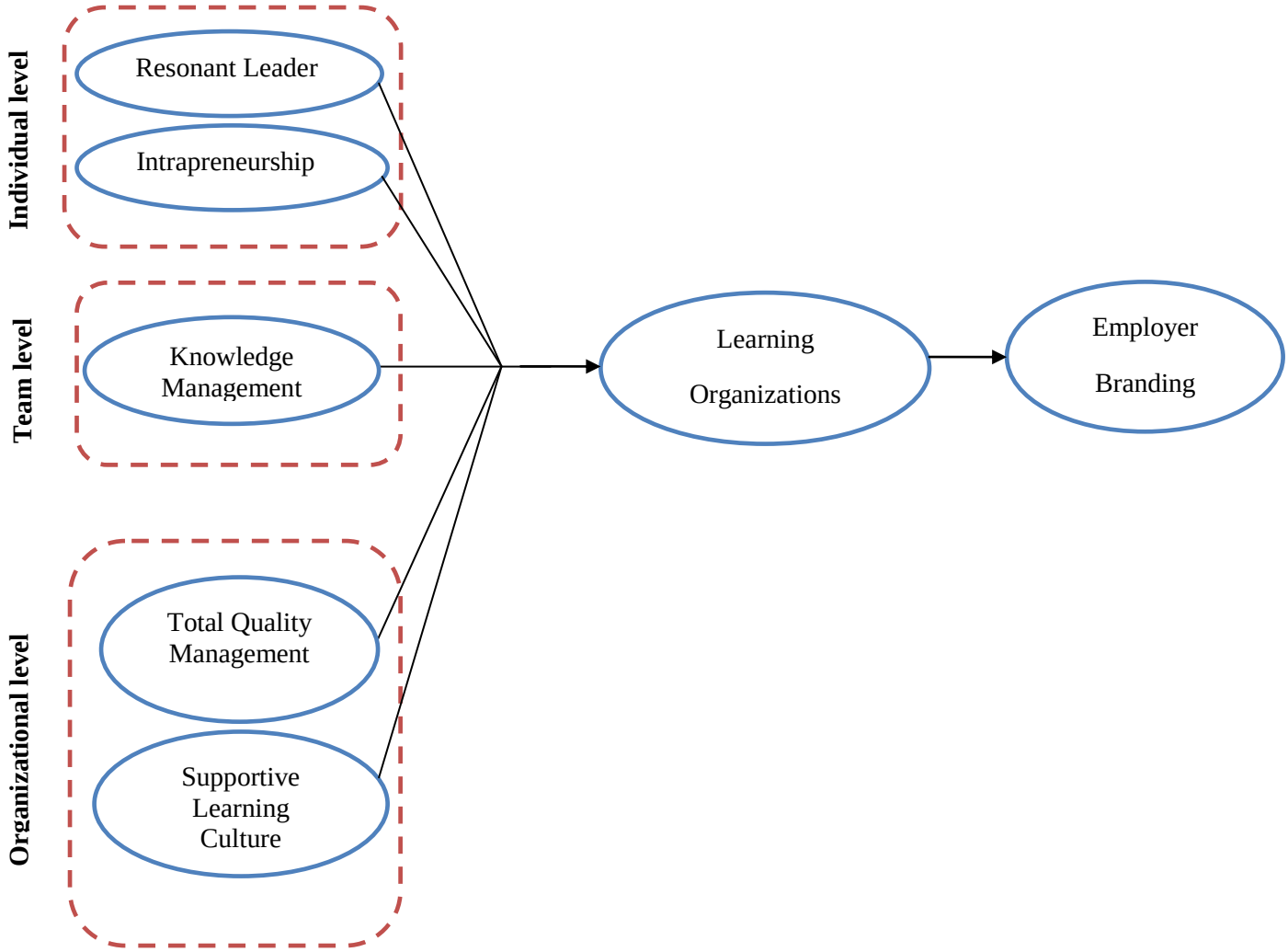

Figure 2.3: Conceptual framework of learning organization integrating individual, team, and organizational level variables

CHAPTER 3

HYPOTHESES AND CONCEPTUAL FRAMEWORK

3.1 Introduction

Review of literature on learning organizations has helped in identifying individual, team, and organizational level variables that act as enablers of learning organization. These variables are resonant leadership and intrapreneurship at individual level, knowledge management at team level, and total quality management and supportive learning culture at organizational level. In this study, learning organization has been measured through seven dimensions: continuous learning, inquiry and dialogue, collaboration and team learning, embedded systems, empowerment, systems connection, and strategic leadership. The process of transfer of learning within organizations is explained through a cause and effect relationship among these variables to develop a conceptual framework. A learning organization is like an employer brand to provide functional, economic, and psychological benefits to its employees.

3.2 Hypotheses formulation

3.2.1 Resonant leaders and learning organization

Leaders play an important role in making organizations learn through a procedure of enunciating a clear vision and mission, communication, and showing concern for employees personal growth and development by imparting training, rewards, recognition, and incentives (Garvin, Edmondson, & Gino, 2008). In a dynamic and fast changing environment, organizations are required to learn faster than their competitors. To be vanguards in the industry they need to upgrade their system, structure, and technology as a response to shift in customer demands. They need to mentally prepare their employees to willfully embrace change. Subordinates resist learning new practices and technology because of fear and they don’t want to come out of their comfort zone losing their position and authority. In such case, leaders play a significant role in encouraging and motivating subordinates to accept change.

Though academic literature has references on impact of transactional and transformational leadership style on subordinate’s performance (Bass, Avolio, Jung, & Berson, 2003). Both these leaders encourage subordinates through a process of social exchange. Transactional leaders motivate subordinates through reward and punishment. Transformational leaders exert employee performance through individualized consideration, intellectual stimulation, idealized

influence, and inspirational motivation (Bass, Avolio, Jung, & Berson, 2003). Such leaders satisfy the needs of the subordinates (individualized consideration) and encourage creative problem solving (intellectual stimulation). They act as role models for their subordinates (idealized influence). They also encourage their subordinates to be optimistic in achieving goals (inspirational motivation) resulting in commitment and enthusiasm (Burns, 1978). However, these leaders are bound by organizational rules and regulations and are concerned about organization's well being rather than individual's well being (Northouse, 2012). Although, a dyadic relationship exists between a leader and his/her subordinate, leaders show more concern on attaining organizational vision and empower subordinates to attain it. Subordinates develop enthusiasm to adopt new roles and responsibilities. But this vigor and energy is short-lived and fades with time. For any change to become part of organizational life, a visionary leader with a continuous learning approach and concern for both subordinates and organization's development is required. This requires participation of subordinates in formation of organization's vision. Goal setting theory states that a leader can motivate subordinates to discard old behavior, habits, and embrace new values, practices, and methods with shared vision, compassion, and relational energy (Locke, 1986). Change engenders individuals in a state of emotional turmoil of loosing current position, power, and core competencies. Individuals don't want to come out of 'competency traps' (Shipton, 2006). Therefore, motivating subordinates to adapt to change requires emotionally intelligent resonant leaders who would guide them through shared vision, compassion, and overall positive mood (Goleman, Boyatzis, & McKee, 2013). Resonant leaders would propagate learning culture in the organization, motivating subordinates, understanding their growth needs, and generating creativity and innovativeness (Lenka & Chawla, 2015). Such leaders are optimistic in their views and handle their emotions through self-confidence and high self-esteem (Srivastava, Sibia, & Misra, 2008). Leader's dreams and aspirations help the subordinates to form a desired image of the future (shared vision), his/her empathy and understanding towards other's feelings result in long term success (compassion), and his/her positive emotions are spread among the colleagues even under extreme work stress or organizational crisis (overall positive mood).

Shared vision is a proactive measure for continuous learning (Loon Hoe, 2007). Active involvement of organizational members in development, communication, and dissemination of organizational vision through inquiry and dialogue promotes team learning (Wang & Raqif, 2009). The employees feel empowered and develop a sense of purpose and direction (Orton & Weick, 1990). Social capital theory states that employee's participation in development of vision creates an association with organization's goal and provides reason enough to accept

change (Leana & Van Buren, 1999). An empathetic, trustworthy, and socially concerned leader raises self-confidence of subordinates and garners their commitment towards organization's vision (Lenka, Suar, & Mohapatra, 2010a). Resonant leaders are compassionate and have concern for others. They are conscious of subordinate's inhibitions of discarding their past learning and educate them to learn competencies required for performing new roles. Because of leader's rational approach they are able to remove insecurity and fear from subordinates (Choudrie & Selamat, 2005). Individuals develop trust with the leader and abrogate negative feelings. A learning environment of knowledge sharing is generated with initiative of a vibrant leader. Such leaders can evoke positive attitude, dedication, and commitment among subordinates towards learning goals (Tien & Shin Chao, 2010). They are buoyant in their attitude by developing positive mood of subordinates and by teaching them to manage their and other's emotions (Misra, 2011). They ensure harmony and friendly interactions through knowledge sharing practices, resulting in continuous team learning.

Resonant leaders inspire subordinates to imbibe trust and cooperation thereby facilitating transfer of learning from individual to team. Subordinates sometimes feel increased stress and tension at the workplace. These leaders possess such competencies and skills, which help their subordinates to get rid of burnout at workplace (Singh & Singh, 2008; Misra, 2010). Leaders high on emotional intelligence drive employee performance through the process of emotional contagion (Hatfield, Cacioppo, & Rapson, 1993). Subordinates mimic and harmonize vibrant energy and commitment exhibited by their resonant leaders with same fervor and enthusiasm to create a conducive environment for learning (Boyatzis, Passarelli, Koenig, Lowe, Mathew, Stoller, & Phillips, 2011). Leaders are concerned with subordinate's insecurity and mobilize dynamic capability in them to learn competencies, technology, and methods. They encourage subordinates to learn at a faster rate than their competitors and develop provision to convert tacit knowledge to explicit knowledge. Explicit knowledge becomes part of embedded systems of organization called organizational learning. Employees would be receptive to new competencies and develop as intrapreneurs only when they can visualize their own professional and personal development through a learning organization. Therefore, we propose,

H_1 : Resonant leaders facilitate developing a learning organization.

3.2.2 Intrapreneurship and learning organization

Intrapreneurship is a business practice of motivating employees with entrepreneurial skills to take initiative and innovate rapidly (Pinchot, 1985). Organizations emphasize on developing

employees who think out of the box and bring creative ideas to the workplace. This helps the employees to improve organizational innovation to deal with uncertainties (Pandya & Ananad, 2008; Seo, Han, & Cho, 2008). Organizations are encouraging employees to develop intrapreneurial spirit thereby creating an atmosphere of creativity and innovation (Kuratko & Hodgetts, 2001). Intrapreneurship promotes new knowledge through interaction, dialogue, and inquiry, thereby updating the previous learning and skills of an employee and making them more innovative (Hampel-Milagrosa, Loewe, & Reeg, 2013). It encourages individual learning by facilitating employees to challenge and question current methods, processes, and technologies (Molina & Callahan, 2007). Learning is an important factor for intrapreneurial activity. It allows intrapreneurs to create and share knowledge through intuition and interpretation (Franco & Haase, 2009). Intuitive person proactively sense organizational crisis and try to develop a feasible solution through collective understanding with other employees. They are able to interpret the organizational reality with a meaningful solution. These employees act like devil's advocate, questioning the present status quo or frame of reference of organization and suggest new systems, methods, and technology for continuous learning. Risk-taking, initiation, and innovativeness are the three most important dimensions that can foster intrapreneurship in an organization (Garćıa-Morales, Llorens-Montes, & Verdu´-Jover, 2006; Molina & Callahan, 2007; 2009). Risk taking is boldness in pursuing new opportunities. Initiation is being pro-active in pursuing opportunities to enter into new market. Innovativeness is the newer ways of accomplishing task (Antoncic & Hisrich, 2003).

Employees search opportunities through a continuous process of trial and error with meager chances of approval. This process involves enormous amount of continuous learning. When employees work in collaboration, they gain a learning experience from it by developing an innovative solution through inquiry and dialogue. They take initiative to generate umpteen numbers of trails when supported with decision-making power. The opportunities identified have to be embedded in organization repository for future reference of employees. This initiative helps employees to sense market needs and generate innovative solutions. Innovative ability of the organization influences strategic planning and improves business operations. Practice of intrapreneurship depends on the type and nature of the organization. These organizations have been categorized as defender (Miles, Snow, Meyer, & Coleman, 1978) and adaptive organizations (Mintzberg, 1973). Defender organizations are conservative and risk-averse, whereas, adaptive organizations are risk-taking and adapt quickly to dynamic environment. Adaptive organizations are optimistic to promote knowledge sharing and continuous learning. Individuals are empowered to introduce new knowledge for designing

innovative products and services (Lumpkin & Dess, 1996; Knight, 1997). Thus, learning occurs at individual and team levels, resulting in a learning organization. Imagination, intuition, authority, will, sociability, energy, and flexibility reinforce intrapreneurial behavior of an employee (Lessem, 1988). Theory of intrapreneurship states that learning is a key to survival for intrapreneurial activity as it promotes new opportunities through continuous learning and inquiry and dialogue. Therefore, we propose,

H_2 : Intrapreneurship facilitate developing a learning organization.

3.2.3 Knowledge management and learning organization

Strategic management theory (Earl, 1994), Knowledge based theory of the firm (Grant, 1996), and theory of dynamic capability (Baskerville & Dulipovici, 2006) together reinforce that organizational knowledge is an inimitable resource. It helps an organization to rapidly respond and compete effectively in dynamic market. Thus, knowledge must be managed effectively to develop organizational capability and to leverage learning (Dhiman, 2006).

Knowledge management is a systematic process of creation and acquisition, transformation and storage, feedback and improvement, and dissemination and usage of knowledge to develop new insights and dispense learning (Bhusry & Ranjan, 2011). Firstly, knowledge is generated while working on joint projects and developing benchmarking practices (creation and acquisition), then it is transformed into various forms such as databases and structured documents (transformation and storage), once the knowledge is stored, the knowledge is maintained through continuous evaluation (feedback and improvement), and lastly, the knowledge is deployed in the form of development of new projects (dissemination and usage). Knowledge management helps the organization to maintain the records of past and present events. It not only makes possible for the organizations to fetch required information at once but also makes it capable of being proactive to dynamic environment. When organization follows knowledge management practices, knowledge is stored in explicit form for easy accessibility to members. Employees pay attention to this knowledge that is useful to them in their daily tasks (Banducci & Semetko, 2002).

Knowledge creation and acquisition is a mechanism through which knowledge is gathered from knowledge workers by a team of knowledge developers adopting various knowledge acquisition techniques like concept mapping, case studies, repertory grid, protocol analysis, brainstorming, and on sight observation. Knowledge acquisition involves direct and indirect interaction of knowledge workers with knowledge developers. It can either be in the form of

one to one interaction or involving team of experts and knowledge developers. Intellectual capital theory validates that the knowledge created is an asset for the organization (Baskerville & Dulipovici, 2006). New knowledge develops organizations capability to learn and adapt. When new knowledge is regularly created it helps an organization to overcome redundant and obsolete practices and adopt self-renewal strategy (Loermans, 2002). This empowers individuals to create and update their knowledge for their own and organization's benefit. Employees share their knowledge with other individuals thereby facilitating team learning, which is central to effective management of organizational knowledge (Cho & Su, 2007). However, new knowledge created but not properly organized in the firm's repositories adds no value to organizational members and is forgotten over time called organizational amnesia (O'Leary,n.d., 2013). Therefore, there is a need to accumulate tacit knowledge in a systematic manner in organization's database (Goldstein, Cho, & Zack, 1990). Feedback and improvement is a significant step in knowledge management process that regularly updates organizational knowledge available in embedded systems (Pemberton & Stonehouse, 2000). Computer based technologies/information systems are continuously updated for better and quick transmission of knowledge within an organisation. The stored knowledge is regularly evaluated by internal and external experts. This knowledge is then promulgated and utilized to enhance organization's problem solving, decision-making, and creativity and innovation (Gold, Malhotra, & Segars, 2001).

Resource based view of the firm states that knowledge management is critical determinant of competitive advantage that cannot be imitated by competitors (Barney, 2000). Knowledge management embraces learning and nurtures it to flourish into a well-integrated system that dwells into whole organization. Therefore, to create a learning organization, it is critical that employees are provided with necessary system support to use and disseminate their newly acquired knowledge (Chawla & Joshi, 2011a). Thus, it can be said that effective knowledge management practices are needed to foster learning at all levels. Therefore, we propose,

H_3 : Knowledge management facilitate developing a learning organization.

3.2.4 Total quality management and learning organization

Hedberg, 1981 states that organizations develop ideologies over time by practicing certain behaviors, mental maps, and norms thereby making individuals prisoners of existing systems and rules called competency trap (Bessant & Caffyn, 1997). Continuous improvement processes, programmes, and activities have become a way of life in many organizations to

foster learning. TQM is a management philosophy that exploits human, financial, and technological resources to achieve continuous improvement (Sabet, Saleket, Roumi, & Dezfoulian, 2012). It is total involvement of the organizational members from top management to production line workers (Feigenbaum, 1991). TQM integrates all functions and processes within the organization to achieve continuous improvement in quality standards (Lenka, Suar, & Mohapatra, 2010b). The initiative of TQM is being adopted in almost all the organizations that aim for quality improvement. Delivering high quality and keeping stakeholders satisfied is considered to be critical for survival. It has become the duty of every organization to successfully implement TQM practices to attain quality standards. Quality circles are one such way that ensures total involvement of everyone in the organization. It helps the organizational members to reflect on their ideas and improve their decision making process collectively, otherwise called as task reflexivity (Carter & West, 1998). This process of interaction between the individuals engages them in discussions about maintaining quality standards thereby resulting in continuous improvement and learning. In a reflexive team, members generally retrospect their past experiences, share events, and know-how. Within teams, they act like devil's advocate to create ideas, thereby promoting team learning (Hoegl & Parboteeah, 2006; Schippers,West, & Dawson, 2012). Revan's theory emphasizes on learning from past experiences to update current knowledge (Yeo & Gold, 2011).

Market based theory of competitive advantage supports that TQM continuously updates existing technology and systems (Conner, 1991). Resource based view of the firm also states that TQM makes optimum utilization of resources through total involvement, continuous improvement, and reflexive decision making of team members (Barney, 2000). Open systems theory is based on the premise of organization-environment fit concept, where organizations continuously learn and adapt to remain innovative and resilient (Von Bertanlanffy, 1956). Therefore, management implements TQM practices in the organization to attain quality, as a vehicle for organizational learning and improve various processes (Sohal & Morrison, 1995). According to learning wave theory, total quality movement is divided into three waves (Senge, 1992). The first wave describes the continuous improvement process. The second wave is raising the quality of thinking and interaction. The third wave institutionalizes the first two waves thereby transforming into a learning organization. Thus, TQM philosophy has been formed on the concept of learning organization and has a great relevance in maintaining the learning environment. Therefore, we propose,

H_4 : Total quality management facilitate developing a learning organization.

3.2.5 Supportive learning culture and learning organization

Supportive learning culture exists in an organization where there is a visionary leader, known as resonant leader who binds people together for a common cause so that they interact and learn collaboratively when facilitated by organic structure, open communication, and affective & cognitive trust. Supportive culture fosters challenging tasks, trust, innovation, and group cohesion and also plays an essential part in shaping what employees think and do (Pool, 2000; Semetko & Mandelli, 1997). In an uncertain environment to develop learning organizations, structural reforms are made (Randeree, 2006). Contingency theory states that organic structure is suitable in dynamic environment because it facilitates innovation, risk-taking, competency building, teamwork, and horizontal communication (Burns & Stalker, 1961; Hunter, 2000). A supportive culture with flat structure encourages developing a flexible HR system that can be adapted quickly and questions routines and procedures (Lucas & Kline, 2008; Tomar & Dhiman, 2011). Such culture stimulates innovative thinking and creative problem solving thereby encouraging individuals to be imaginative, risk-taking, and challenging the status quo (Schein, 1993). Organic structure gives empowerment to employees to solve problems and take decisions. It promotes open communication in an organization, which removes fear and inhibition of employees. Open communication is a method, which breaks the barrier between management and employees and helps in transfer of knowledge (Soley & Pandya, 2003). Employees can question and seek management support thereby reducing grapevine. It facilitates transparent, honest, and clear interactions, which encourages employees to provide suggestions and feedback thereby developing trust among them. Trust can be affective or cognitive (McAllister, 1995). Affective trust is the emotional component, which occurs early in the relationships and binds people together. Whereas, cognitive trust is the logical component, developed due to individuals knowledge and professional competence. Both affective and cognitive trust favour knowledge sharing and social networking because of emotional bonding and competence that promotes interaction (Swift & Hwang, 2013). This interaction results in exchange of data, information, and knowledge, thereby increasing organizational learning capability.

Thus, supportive learning culture cultivates the spirit of learning in the core of the organization and imbibes learning in its values. To ensure better learning opportunities, an organization operates flexibly that results in open communication among members through affective and cognitive trust. Therefore, we propose,

H_5: Supportive learning culture facilitates developing a learning organization.

3.2.6 Learning organization and employer branding

Learning organization is an organization that constantly acquires knowledge and transforms itself for new inventions (Watkins & Marsick, 1993). It is characterized by continuous learning, inquiry and dialogue, collaboration and team learning, embedded system, empowerment, systems connection, and strategic leadership (Watkins & Marsick, 1993). Continuous learning is enhancing capability learning of individuals. Inquiry and dialogue means organizations create a culture of questioning the insights and assumptions through interactive process. Collaboration and team learning refers to the spirit of working collaboratively. Embedded system refers to the establishment of systems to share and capture learning. Empowerment is involving everyone in the organization for the development of a shared vision. System connection represents the actions taken to connect the organization to its internal and external environment. Strategic leaders think strategically to change and move the organization in new markets through the expansion of capacity of organization and individuals through process of learning. Learning organization is showcased as the one, which propagates learning culture, with sole intention of imparting new knowledge in the employees through mechanism of continuous learning and establishing itself as an employer brand.

Employer branding is the image of an organization to be considered as a great place to work. It is the combination of functional, economic, and psychological benefits provided by an organization (Ambler & Barrow, 1996). Functional benefits include career growth and training and development. Economic benefits include compensation and rewards whereas psychological benefits include safe and cooperative learning environment. The concept of employer branding has emerged from human capital theory, resource-based view of the firm, and signalling theory. First two, states that attracting talented individuals is as important as acquiring any other resource to build a competitive advantage (Backhaus & Tikoo, 2004). Signalling theory gives positive picture of the organization to attract potential employees (Celani & Singh, 2011). Thus, employer branding makes company attractive for existing and potential employees by offering certain benefits such as friendly and informal learning culture, flexibility, and attractive packages.

Factors that make an employer attractive are relationship among workers, altruistic value, learning and development, friendly organizational culture, flexible organization's structure, corporate social responsibility, global opportunities, and economic value (Backhaus & Tikoo, 2004; Bhatnagar & Srivastava, 2008; Pingle & Sodhi, 2011). Organizations fulfilling these factors make the existing and prospective employees stay attached to the organization. The cost

of attracting new employees is more than the cost of retaining existing employees. Employer brands are the first choice of prospective candidates applying for a job as it gives a strong reputation and image of an employer (Katoen & Macioschek, 2007). Psychological contract theory states that a promise is made between the employer and employee on the basis of mutual expectations of inputs and outcomes (Rousseau, 1995). When an organization focuses entirely on individual's learning & development by providing a conducive learning culture, individuals themselves become committed to organization. Fairer procedures being followed by organization makes the employee feel more connected to it. Such individuals develop a sense of belongingness with the organization and continue to maintain good relationship (Lenka, Suar, & Mohaptra, 2009). The employees feel satisfied and connected when they are able to align individual identity with the organizations identity**.** Social identity theory reaffirms that an employee feels emotionally attached to the organization that provides an opportunity for learning and professional growth (Tajfel & Turner, 1979). Once the employee is motivated, his/her interest and acceptance towards learning increases thereby resulting in continuous learning process. This will not only be beneficial for the existing employees but also for potential employees.

Thus, in this way the organization will emerge as an employer brand and helps in improving recruitment, employee engagement, and retention of employees by providing a sense of belongingness and continuous learning (Barrow & Mosley, 2011). Therefore, a learning organization can be percolated as a stable employer brand through its sense of belongingness, identity, and reputation. The attractive attributes of organization will be beneficial for the existing and prospective employees, thereby making an organization a strong employer brand. Therefore, we propose,

H_6: Employer branding is considered as a probable consequence of learning organization.

Based on all the above hypothesized relationships, an integrated conceptual framework of learning organization has been formulated (Figure 3.1).

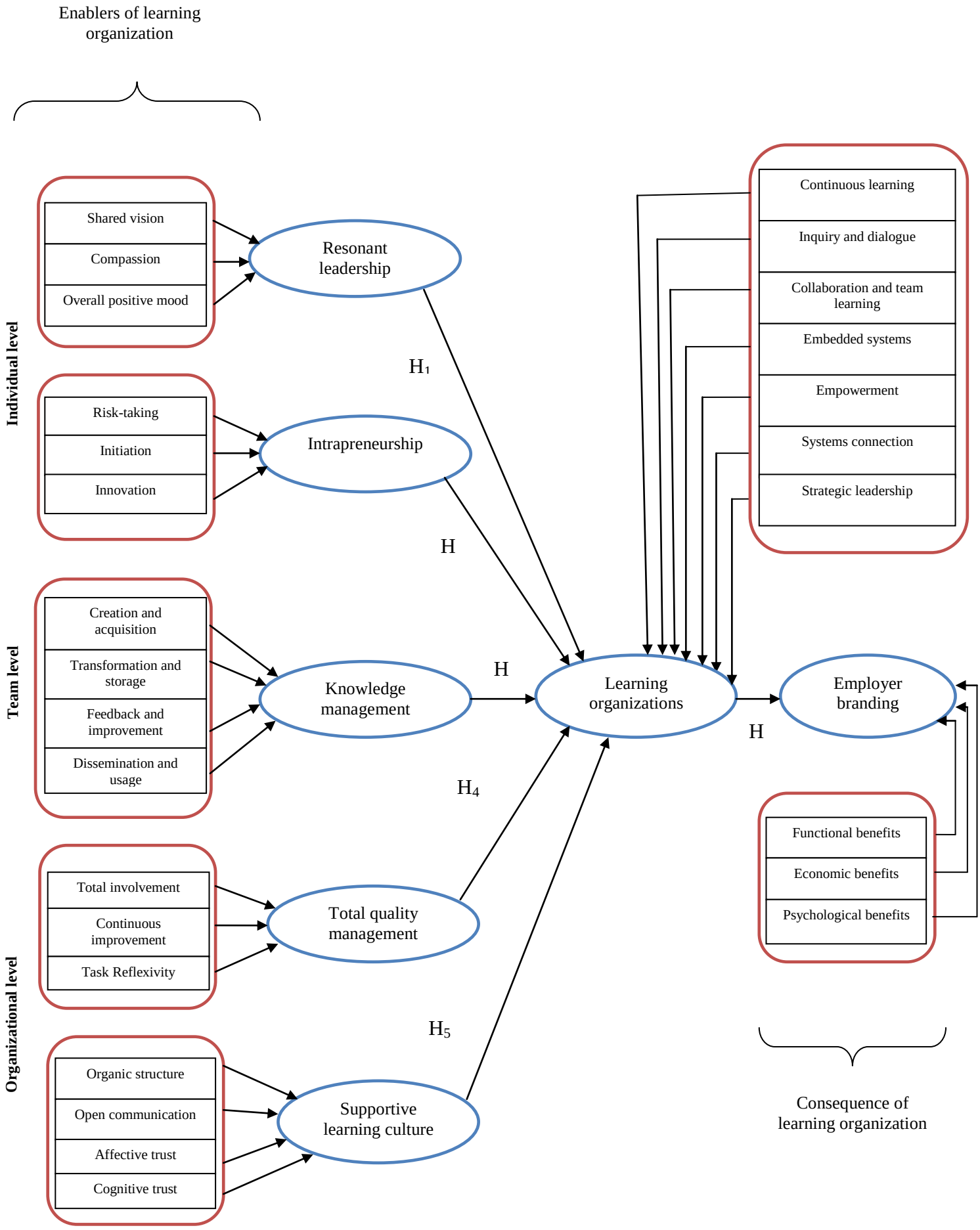

Figure 3.1: Conceptual framework of learning organization with hypothesized relationships

CHAPTER 4

METHODOLOGY

This chapter provides a comprehensive view of the methods for selecting sample and measures while conducting research.

4.1 Sample and procedure

Sample is a sub group representing the population in the study (Malhotra & Dash, 2009). Indian management institutes both in the private and government sector are considered as unit of analysis in this study. Faculty members and directors of management institutes across India were selected at random as respondents for the present study. The criterion kept during the survey was that the institution must have minimum 5 years of establishment and is recognized by University Grants Commission (UGC) or All Indian Council for Technical Education (AICTE). Data is collected over a period of four months from March, 2014 to June, 2014.

With the help of relevant literature and theories of learning organization, faculty and directors of management institutes have been selected as respondents of the present study (Cheng, 2009; DeRoberto, 2011; Kelly, 2000; Kirby, Paradise, & King, 1992; Lam, Chan, Pan, & Wei, 2003). A cover letter briefing the purpose of the survey, details of researchers, and instructions for filling the questionnaire have been provided. Questionnaire has been segregated into two parts: Part A and Part B. Faculty members were the respondents for part A (Appendix A) and directors of the institute were the respondents for part B of survey questionnaire (Appendix A). Management institutes across the country from states of Andhra Pradesh, Bihar, Chattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Meghalaya, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, Uttrakhand, and West Bengal have been covered. Table 4.1 illustrates the number of higher educational institutes from where data have been procured covering 19 states of India. To have a higher response rate, the questionnaire was filled by making personal visits to the institutes resulting in a response rate of 100 percent.

Table 4.1: *Number of Management Institutes Covered in 19 States across India*

States	*Number of Institutes in private sector*	*Number of Institutes in government sector*
Andhra Pradesh	6	2
Bihar	2	3
Chattisgarh	2	2

Delhi	15	14
Gujarat	8	7
Haryana	16	9
Himachal Pradesh	5	3
Jharkhand	1	2
Karnataka	2	1
Madhya Pradesh	8	3
Maharashtra	11	4
Meghalaya	0	3
Punjab	37	13
Rajasthan	19	13
Sikkim	1	0
Tamil Nadu	2	1
Uttar Pradesh	58	8
Uttrakhand	10	3
West Bengal	2	4
Total	205	95

4.1.1 Sample size

Sample size for the study is the completely filled responses obtained from personal visits (Hair, Black, Babin, Anderson, & Tatham, 2009). Sample size is selected on the basis of research design, number of variables, techniques for analysis, and literature support (Malhotra & Dash, 2009). The present study has 27 variables that exhibits multiple cause and effect relationship. Therefore, structural equation modeling has been used for data analysis. Subject to variable ratio range of 1:10, a sample size of 10-20 respondents per variable is appropriate to measure reliability, exploratory factor analysis, and cause and effect relationship between several independent and dependent variables (Ferguson & Cox, 1993; Hair, Black, Babin, Anderson, & Tatham, 2009). Ideally 100-200 respondents are required to maintain internal consistency of the scale (Spector, 1992). Although large sample reduces the sampling error but it also affects sensitivity of the results (Hair, Black, Babin, Anderson, & Tatham, 2009). Following these guidelines, a sample size has been limited to 300 management institutes as unit of analysis. As on 2014, there are 3900 management institutes in India recognized by UGC or AICTE constituting 10% of the population. These institutes have been selected on random basis covering 19 states of India as a representative sample for the present study. 300 faculty members and 300 directors in each of these institutes were respondents of the self-designed questionnaire.

4.1.2 Sample Analysis

Data has been collected using a self-designed instrument developed with the help of extant literature. Although, questionnaire method is time consuming and costly, but a large amount of information was collected from a large segments of people, resulting in higher response rate. Therefore, this method was adopted for the present study.

4.1.3 Data collection process and response rate

Data were collected during the period of March, 2014 to June, 2014. Total of 300 faculty members and 300 directors of the respective institutes were approached to respond to the survey. The survey questions were designed specifically to meet present objectives of the study. Part- A was to be filled by faculty members and Part-B was to be filled by the directors of the same institute. The participants have given their perception of the institute as a learning organization. There was no right or wrong answer to the items. The questionnaire took approximately 12-15 minutes to complete. All those who participated in the study did so voluntarily and the data were kept confidential and anonymous.

To make the data collection process smooth and to reduce the non- response rate, the survey is performed through following steps:

1. Prior appointment was fixed with the faculty member.
2. In case that faculty member is not available, some other faculty member from the institute is contacted.
3. That faculty member is selected randomly who was easily accessible and was asked to fill Part-A of the questionnaire.
4. Prior appointment with the director was taken. If s/he was not available, in that case Dean or Head of the department was approached and was asked to fill Part-B of the questionnaire.
5. Doubts related to the questionnaires were answered on the spot.
6. Those who had not returned the questionnaire on the same day were contacted again to return the filled questionnaire by next working day.
7. Following this procedure, questionnaires with response rate of 100 percent was obtained.

4.1.4 Demographic details of respondents

Data on gender, qualification, designation, and awareness of learning organizations have been obtained in part A of the questionnaire (Table 4.2). Whereas, part B of the questionnaire procured details like gender, qualification, designation, type of institute, and awareness of learning organizations (Table 4.3).

The sample profile of faculty members included 54% male and 46% female faculty members. 56.3% of the respondents are postgraduate and 43.7% have doctoral degree. 49.3% of the data were collected from assistant professors and 24% from associate professors. 84% of the faculty members revealed that they knew about concept of learning organization.

Sample profile of Directors/Deans/Head of the department had 74% of the male respondents and 26% were female respondents. 10% of respondents were Directors, 16% Dean, and 74% were Head of the departments. 84% of the respondents were PhD degree holders and 16% of respondents have post doctorate degree. Data has been collected from 69% private management institutes and 31% government management institutes. 96% of the respondents indicated that they are aware of the concept of learning organization.

Table 4.2: *Sample Profile of Faculty Members*

Attributes/Parameters	*Respondents (In Numbers)*	*Respondents in %*	*Management institutes in private sector*		*Management institutes in government sector*	
			Number	*% of total*	*Number*	*% of total*
Gender	Male = 160	54%	115	56%	45	47.3%
	Female= 140	46%	90	44%	50	52.7%
Qualification	Post Graduate= 169	56.3%	147	71.7%	22	23.2%
	Doctorate/post-doctorate= 131	43.7%	58	28.3%	73	76.8%
Designation	Lecturer= 36	12%	27	13.2%	9	9.5%
	Assistant Professor= 148	49.3%	97	47.3%	51	53.7%

	Associate Professor= 72	24%	50	24.4%	22	23.2%
	Professor= 44	14.7%	31	15.2%	13	13.6%
Awareness of learning organization	Yes= 288	96%	198	96.6%	90	94.7%
	No= 12	4%	47	3.4%	5	.3%

(Source: Primary data)

Table 4.3: *Sample Profile of Directors/Deans/Head of the departments*

Attributes/Parameters	*Respondents (In Numbers)*	*Respondents in %*	*Management institutes in private sector*		*Management institutes in government sector*	
			Number	*% of total*	*Number*	*% of total*
Gender	Male= 222	74%	137	67%	85	89%
	Female=78	26%	68	33%	10	11%
Qualification	Doctorate= 252	84%	176	86%	76	80%
	Post doctorate= 48	16%	29	14%	19	20%
Designation	Director= 31	10%	20	10%	11	12%
	Dean= 47	16%	34	16%	13	14%
	HOD= 222	74%	151	74%	71	74%
Type of institute	Public=95 (31%)					
	Private=205 (69%)					
Awareness of learning organization	Yes= 288	96%	198	96.6%	90	94.7%
	No= 12	4.1%	47	3.4%	5	5.3%

(Source: Primary data)

4.2 Measures

A self-designed questionnaire was used to measure the enablers of learning organization at individual, team, and organizational level in management institutes in India. The items of the scale were developed reviewing extensive literature in the field of learning organization. The questionnaire is divided into two parts A and B respectively (Appendix A). Part A includes questions to assess responses on certain variables: resonant leadership, intrapreneurship, knowledge management, supportive learning culture, and employer branding and were asked from faculty members. Part B includes questions to measure certain variables: total quality management and learning organization that have been answered by the Directors/Deans/Heads of the department. Reliability and validity of the seven constructs identified for the present study have been assessed. Relevant literature has been surveyed to develop the constructs and design the questionnaire (Table 4.4). The items are generated in the context of institutions of higher learning. Experts from IIT's, IIM's and leading management institutes of India were consulted to finally develop the constructs. The fundamental criteria required for developing construct is its content validity i.e. the instrument measures all aspects of the construct, specifically domain, item generation, and purification of the scale. The resulting scale, which is developed, measured the construct validity identifying its underlying factors, generating items representing all dimensions, and purifying measures to develop an instrument with content validity.

4.2.1 Measurement Purification

A pilot study was conducted, where the initial survey questionnaire was administrated to 50 MBA students in both 1st and 2nd year enrolled in leading B-schools of India. With the obtained feedback from experts and pilot study, the survey questionnaire has been revised and developed iteratively. The final version of questionnaire consists of 121 questions divided in part A and part B respectively to procure responses from faculty members and directors of institutes.

Table 4.4: *Literature Used for Developing the Constructs*

Construct	*Variable*	*References from literature*
Resonant leadership	Shared vision	Boyatzis, 2008; Singh, 2004
	Compassion	
	Overall positive mood	
Intrapreneurship	Risk-taking	Hill, 2003; Lessem,1987, Sayeed
	Initiation	& Gazdar,2003

	Innovation	
Knowledge management	Creation and acquisition Transformation and storage Feedback and improvement Dissemination and usage	Omerzel, Biloslavo, & Trnavcevic ,2011; Wei-he & Qiu-Yan, 2006;
Total quality management	Total involvement Continuous improvement Task reflexivity	Morrison & Terziovski, 2001; Rao, Solis, & Raghunathan, 1999 Schippers, Hartog, & Koopman, 2007
Supportive learning culture	Organic structure Open communication Trust	Huang, Rode, & Schroeder, 2011 Hirst & Mann, 2004 McAllister, 1995
Learning organizations	Continuous learning Inquiry and dialogue Collaboration and team learning Embedded systems Empowerment Systems connection Strategic leadership	Marsick & Watkins, 2003
Employer branding	Functional benefits Economic benefits Psychological benefits	Berthon, Ewing, & Hah, 2005; Knox & Freeman, 2006; Pingle & Sodhi, 2011

(Source: Above mentioned respective research papers)

Responses description against each item of the variable was given on 5-point Likert type scale with 1 as *"strongly disagree"*, 2 as *"somewhat disagree",* 3 as *"neither agree nor disagree",* 4 as *"somewhat agree",* and 5 as *"strongly agree".* Likert scale is easy to understand, quick, and accurate in collecting responses (Malhotra & Dash, 2009).

4.2.2 Resonant leadership

Resonant leaders play an important role in developing an institute into a learning organization. In this research, the construct resonant leadership comprises of variables such as shared vision, compassion, and overall positive mood. Questions to assess each variable are formed and

measured using Likert type scale. Higher the score of each item, higher is the favorable response on it. Shared vision has been measured through items: our director (a) 'provides vision for teaching, learning, and research excellence', (b) 'ensures that our involvement in teaching and research is aligned with institute's overall vision', and (c) 'ensures our involvement in formation of a vision'. Responses for compassion have been obtained through items: our director (a) 'cares about our professional development', (b)'cares about our personal development', and (c) 'likes when we accept constructive feedback'. For overall positive mood, faculty members were asked to respond on items: our director (a) 'encourages interdisciplinary research to strengthen our knowledge', (b) 'praises us in meetings to encourage us', and (c) 'delegate's administrative responsibilities'.

4.2.3 Intrapreneurship

Intrapreneurship measures risk-taking, initiation, and innovative abilities among the employees. Risk taking is measured through items: our institute (a) 'encourages us to take risks while working in R&D projects', (b) 'is concerned that failure will not demotivate us', and (c) 'encourages us to take risks in starting of a new academic project'. Questions on initiation are: our institute (a) 'promotes our involvement in incubation and intrapreneurship cell', (b) 'encourages us to organize various conferences/seminars/workshops', and (c) 'facilitates to develop institute's R & D centers'. Likewise, innovation has been measured through questions: our institute encourages us to (a) 'adopt audio-visual and action-learning techniques in teaching', (b) 'adopt innovative methods in teaching and research', (c) 'design innovative strategies to achieve institute's goals', and (d) 'tactfully handle complex situations'.

4.2.4 Knowledge management

Knowledge management facilitates collaboration among the employees through sharing of knowledge. Knowledge management has been defined by variables: creation and acquisition, transformation and storage, feedback and improvement, and dissemination and usage. Creation and acquisition are measured using items: our institute encourages (a) 'us to attend conferences/seminars/workshops', (b) 'joint projects with other institutes'; our institute (c) 'invites renowned academicians for lectures', (d) 'invites faculty from other departments', and (e) 'facilitates networking with academicians/industry experts'. Similarly, transformation and storage measures: our institute has a repository of (a) 'educational processes and practices', (b) 'research projects', (c) 'video lectures and e-books', (d) 'faculty and student achievements', (e) 'working research papers and technical reports', (f) 'video lectures of well-known

academicians and researchers', and (g) 'CD's of conferences/seminars/workshops'. Feedback and improvement are measured asking questions: our institute regularly updates (a) 'teaching and research material', (b) 'educational processes and practices', (c) 'faculty and student achievements', (d) 'intranet for quick dissemination of campus news and information', (e) 'student's feedback about classroom lectures and pedagogy', and (f) 'video lectures of well-known academicians and researchers'. Items for dissemination and usage are: our institute (a) 'adopts best practices in teaching, pedagogy, and research activities', (b) 'adopts best practices in educational processes and practices', and (c) 'develops curriculum and pedagogy'.

4.2.5 Total quality management

Total quality management has been defined by variables: total involvement, continuous improvement, and task reflexivity of team members. Total involvement has been measured by asking questions: our institute ensures (a) 'participation of stakeholders to improve educational processes', (b) 'promotion of quality awareness among all employees', (c) 'quality goals initiatives in teaching, research, administration, and consultancy', (d) 'improving quality of placements', (e) 'to imbibe value of quality excellence among stakeholders', (f) 'quality documents are well maintained', (g) 'procedures and manuals have quality standards', and (h) 'employees maintain quality in their tasks'. Continuous improvement is measured by items: our institute encourages (a) 'students to attend seminars/conferences/ workshops', (b) 'social welfare programs and activities such as NCC, NSS, and blood donation', our institute regularly updates (c) 'its practices with benchmark institutes', (d) 'course curriculum as per the industry demands', (e) 'placement procedures to invite best companies'; our institute improves (f) 'quality of pedagogy, computing facilities, physical and digital library, and teaching aids', (g) 'quality of transportation, internet connectivity, hostel facilities, open-air theaters, and gymnasium'; our institute improves quality of (h) 'telecom, post office, hospital, stationary shops, canteens, banks, and ATM counters', (i) 'classrooms, activities room, laboratory, library, and washrooms', (j) 'gardens, campus layout, administrative building, and seminar halls', and (k) 'recruitment/selection procedures of faculty/staff/students'. Task reflexivity of members is measured asking questions: our institute encourages (a) 'faculty to review teaching pedagogy and research', our institute gives feedback (b) 'to upgrade existing management functions', (c) 'to improve quality of educational processes, teaching pedagogy, and resources'.

4.2.6 Supportive learning culture

Supportive learning culture measures variables: organic structure, open communication, and affective and cognitive trust. Organic structure includes the items such as our institute has no procedural bottlenecks in (a) 'examination pattern', (b) 'pedagogy and curriculum', (c) 'introduction of new courses', (d) 'carrying out sponsored research projects', (e) 'setting of labs', (f)'dealing with financial issues', (g)'organizing conferences/seminars/workshops /FDP's/MDP's', and (h) 'permitting guest lectures'. Similarly, open communication includes items: our institute clearly communicates about (a) 'student feedback of teaching performance', (b) 'updated curriculum and pedagogy', (c) 'industry feedback', (d) 'strategic and administrative policies', and (e) 'teaching and research expectations'. Affective trust is measured by asking questions: our director (a) 'has concern for us', (b) 'always keeps his word', My colleagues (c) 'share their ideas with each other', (d) 'feel a sense of loss if any of them is transferred', (e) 'actively listen to each other's problems', (f) 'can talk freely with each other about their difficulties', and (g) 'have faith in each other'. Cognitive trust is assessed by asking questions: our director (a) 'is competent in doing his job', (b) 'trust our competence in organizing events such as conferences/seminars/ workshops/FDP's/MDP's', (c) 'trust our competence of publishing in reputed journals', (d) 'trust our competence in delivering guest lectures', (e) 'trust our competence in attending international exchange programmes', My Colleagues (f) 'trust my teaching ability', (g) 'carry out task with professionalism', (h) 'work with me on joint projects', (i) 'dispense their task with responsibility', and (j) 'trust each other's research ability'.

4.2.7 Learning organizations

Learning organization construct has been categorized into seven variables: continuous learning, inquiry and dialogue, collaboration and team learning, embedded systems, empowerment, system connections, and strategic leadership. Continuous learning has been measured by items: our institute encourages faculty to (a) 'attend conferences/seminars/workshops', (b) 'update their technical knowledge/ know-how', and (c) 'carry out interdisciplinary research'. Inquiry and dialogue includes items: our institute gives feedback (a) 'to upgrade administrative processes ', (b) 'on current research practices' and (c) 'to improve ways of conducting conferences/MDP's/FDP's'. Similarly, collaboration and team learning includes items: our institute recognizes faculty collaboration in (a) 'R & D projects', (b) 'organizing conferences/seminars /workshops/FDP's', and (c)'developing teaching pedagogy and curriculum'. Embedded systems is measured on items: our institute has a repository of latest (a) 'teaching and research material', (b) 'educational processes and practices', and (c) 'video

lectures of academicians/researchers/industry experts'. Empowerment is measured by asking questions: our institute encourages faculty to (a) 'take initiative in R & D projects', (b) 'go for exchange programs', (c) 'update existing curriculum', and (d) 'take administrative responsibility of the institute'. Systems connection includes items: our institute encourages faculty to (a) 'deliver guest lectures in other institutes', (b) 'invite academicians from other institutes for guest lectures', and (c) 'for industrial visits'. Strategic leadership is measured using items: our institute encourages (a) 'faculty to pursue higher studies such as Post-graduation/PhD/Post doctoral', (b) 'faculty to share knowledge with each other', (c) 'faculty to be committed to institute's vision', (d) 'faculty to mentor and coach students', (e) 'joint supervision of PhD students at inter-intra departmental level', and (f) 'faculty to take up joint courses'.

4.2.8 Employer branding

Employer branding has three dimensions: functional, economical, and psychological benefits. Functional benefits includes items: our institute provides (a) 'learning of advanced technologies', (b) 'faculty development program', (c) 'fair promotion on seniority basis', (d) 'fair promotion on merit basis', (e) 'job security', and (f) 'foreign exchange programmes'. Items for measuring economic benefits are: our institute provides (a) 'competitive compensation package as per 6^{th} pay commission/AICTE norms', (b) 'best faculty award/researcher award', (c) 'funds to initiate research projects', and (d) 'incentives for being institute's representatives in examinations such as GATE, JEE, and campus interviews'. Psychological benefits is measured by asking questions: our institute provides (a) '24 hour electricity, internet connection, well ventilated classrooms, and teaching aids', (b) 'flexible timings of class', (c) 'student-teacher interactions', (d) 'good relationships with colleagues', and (e) 'good relationships with director/dean/head of the department'.

4.3 Statistical analysis for measurement purification

Measurement purification is conducted to assess the items reliability measuring unidimensional and multidimensional constructs. Exploratory factor analysis (EFA) was carried out using SPSS 21.0 software to examine underlying factor structure of the constructs. Kaiser Meyer-Olkin measure of sample adequacy was found to be .78, while Bartlett's test of sphericity was found to be sign at p<001. These two tests have indicated that current data set is appropriate for future analysis. The reliability and validity of all variables are measured using SPSS 20.0 and AMOS 21.0 software packages. Reliability of the questionnaire is reported accurately for the

purpose of maintaining internal consistency of the measured items. The reliability coefficients higher than the 0.60 have been considered as standard acceptable in the literature (Hair, Black, Babin, Anderson, & Tatham, 2009). The convergent and discriminant validity was tested using confirmatory factor analysis. Items with factor loadings less than 0.5 were considered as poor performing items and were eliminated. Factor loadings above 0.5 and cross loading of items above 0.4 is highly recommended to keep the items (Hair, Black, Babin, Anderson, & Tatham, 2009). The fitness of the model is tested with the help of CFI (comparative-fit-index), GFI (goodness-of-fit index), NFI (normed fir index), and RMSEA (Root-mean-square error of approximation) (Table 4.5). The recommended values for CFI, GFI, and NFI are .0.90 and for RMSEA is <0.08 (Byrne, 2013; Klien, 2005).

In preliminary stage of survey, 1 item measuring shared vision, 1 item measuring risk-taking, 4 items measuring continuous improvement, 2 item measuring affective trust, 1 item measuring cognitive trust, 1 item measuring strategic leadership, and 1 item measuring psychological benefits have been deleted due to poor reliability. The final questionnaire has been attached in the appendix A.

Next chapter 5 deals with the results.

Table 4.5: *Scale Reliability and Validity*

Variables	*Original items*	*Retained items*	*M*	*SD*	*Cronbach* α	*CFI*	*GFI*	*NFI*	*RMSEA*	*Loading range*
Resonant leadership						0.99	0.98	0.97	0.08	
(a) Shared vision	3	2	7.78	2.13	0.85					0.86-0.87
(b) Compassion	3	3	11.83	2.53	0.72					0.61-0.84
(c) Overall positive mood	3	3	6.62	3.00	0.65					0.60-0.78
Intrapreneurship						0.95	0.93	0.94	0.07	
(a) Risk-taking	3	2	7.10	4.48	0.80					0.81-0.83
(b) Initiation	3	3	11.65	5.51	0.84					0.76-0.84
(c) Innovation	4	4	16.43	4.55	0.86					0.72-0.86
Knowledge management						0.90	0.89	0.89	0.08	
(a) Creation and acquisition	5	5	19.77	2.88	0.86					0.61-0.86
(b) Transformation and storage	7	7	26.85	1.96	0.87					0.67-0.75
(c) Feedback and improvement	6	6	23.95	2.78	0.86					0.60-0.88
(d) Dissemination and usage	3	3	12.07	3.23	0.91					0.81-0.95
Total quality management						0.96	0.90	0.93	0.06	
(a) Total involvement	8	8	31.14	7.57	0.95					0.82-0.90
(b) Continuous improvement	11	7	23.51	3.50	0.67					0.76-0.86
(c) Task-reflexivity	3	3	16.28	2.52	0.77					0.62-0.80
Supportive learning culture						0.96	0.97	0.91	0.07	
(a) Organic structure	8	8	30.34	7.23	0.91					0.71-0.83
(b) Open communication	5	5	19.75	4.33	0.88					0.74-0.81
(c) Affective trust	7	5	23.01	4.39	0.79					0.60-0.68
(d) Cognitive trust	10	9	36.39	5.98	0.88					0.65-0.75
Learning organization						0.95	0.91	0.90	0.08	

(a) Continuous learning	3	3	11.71	2.07	0.71					0.65-0.69
(b) Inquiry and dialogue	3	3	11.18	2.11	0.63					0.50-0.67
(c) Collaboration and team learning	3	3	11.49	2.63	0.78					0.67-0.80
(d) Embedded systems	3	3	11.73	2.08	0.67					0.61-0.70
(e) Empowerment	4	4	13.59	2.71	0.65					0.65-0.79
(f) Systems connection	3	3	11.61	1.91	0.64					0.68-0.74
(g) Strategic leadership	6	5	17.15	3.66	0.63					0.60-0.75
Employer branding						0.90	0.89	0.92	0.08	
(a) Functional benefits	6	6	21.85	5.43	0.84					0.62-0.75
(b) Economic benefits	4	4	14.04	4.37	0.83					0.69-0.78
(c) Psychological benefits	5	4	16.53	3.27	0.78					0.60-0.88

CHAPTER-5

RESULTS

The unit of analysis in the survey was management institutes located in 19 states of India. Faculty members have responded to questions measuring variables: shared vision, compassion, overall positive mood, risk-taking, initiation, innovation, knowledge creation and acquisition, knowledge transformation and storage, knowledge feedback and improvement, knowledge dissemination and usage, organic structure, open communication, affective and cognitive trust, functional benefits, economic benefits, and psychological benefits. Director/Dean/Heads of the department have responded to questions assessing variables: total involvement, continuous improvement, task reflexivity, continuous learning, inquiry and dialogue, collaboration and team learning, embedded systems, empowerment, systems connection, and strategic leadership. Hypothesized relationship among these variables has been assessed using Pearson correlation. Variable number and name has been assigned to all the studied variables. Table 5.1 shows the Pearson correlation among the hypothesized relationships:

- Higher the influence of resonant leader consisting of shared vision, compassion, and overall positive mood, higher is the learning in the organization.
- Higher the influence of intrapreneurship consisting of risk-taking, initiation, and innovation, higher is the learning in the organization.
- Higher the influence of knowledge management consisting of knowledge creation and acquisition, knowledge transformation and storage, knowledge feedback and improvement, and knowledge dissemination and usage, higher is the learning in the organization.
- Higher the influence of total quality management consisting of total involvement, continuous improvement, and task reflexivity, higher is the learning in the organization.
- Higher the influence of supportive learning culture consisting of organic structure, open communication, and affective and cognitive trust, higher is the learning in the organization.
- Higher the influence of continuous learning, inquiry and dialogue, collaboration and team learning, embedded systems, empowerment, systems connection, and strategic leadership, higher is the employer branding.

Table 5.1: *Inter-Correlations among Studied Variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1.SV																											
2. C	70**																										
3. OPM	06	01																									
4. RT	63**	52**	06																								
5. INI	68**	55**	02	63**																							
6. INN	68**	58**	05	68**	64**																						
7. CA	72**	59**	.00	63**	76**	69**																					
8. TS	48**	37**	03	52**	55**	53**	56**																				
9. FI	50**	43**	01	52**	55**	55**	58**	78**																			
10. DU	71**	60**	03	69**	65**	80**	70**	57**	62**																		
11. TI	-09	-05	05	-04	-05	-05	-06	-02	-01	-04																	
12. CI	-08	-07	-04	-06	-04	-09	-01	-06	-05	-05	53**																
13. TR	-12*	-10	08	-12*	-10	-11	-10	-09	-11*	-11	55**	44**															
14. OR	35**	26**	04	32**	42**	28**	38**	45**	48**	35**	-04	-07	-07														
15. OC	57**	47**	-00	53**	59**	56**	56**	65**	77**	65**	-05	-04	-07	55**													
16. AT	61**	64**	03	59**	53**	58**	57**	43**	47**	54**	-01	-07	-08	26**	54**												
17. CT	69**	56**	04	55**	59**	60**	67**	56**	55**	55**	-08	-06	-12*	41**	56**	72**											
18. CL	-06	-09	06	-08	-02	-10	-04	-03	-04	-07	62**	48**	52**	-04	-05	-00	-04										
19. ID	-06	-11	04	-06	-05	-06	-03	01	-01	-08	53**	41**	38**	-02	-05	-01	02	56**									
20. CTL	-13*	-10	03	-06	-05	-08	-08	-04	-05	-06	65**	52**	51**	-06	-07	-02	-07	71**	59**								
21.ES	-09	-05	02	-06	-06	-05	-07	-06	-03	-03	44**	37**	33**	04	-06	00	-03	42**	46**	59**							
22. EMP	-02	-04	14*	-02	03	00	01	-04	-03	01	53**	44**	37**	05	-03	-02	-05	47**	43**	53**	38**						
23. SC	-05	-11*	-06	-09	-06	-08	-02	-05	-02	-03	43**	35**	35**	-06	-05	-13*	-08	44**	46**	46**	29**	34**					
24. SL	04	-00	05	00	01	02	01	-02	-04	03	59**	47**	43**	-00	02	02	01	61**	52**	64**	43**	53**	43**				
25. FB	56**	53**	02	60**	63**	55**	66**	61**	67**	56**	-04	-01	-11	51**	68**	60**	63**	-03	-04	-09	-06	00	-04	-00			
26.EB	39**	39**	06	34**	48**	31**	45**	44**	45**	41**	05	04	-05	45**	53**	33**	38**	05	02	02	05	05	02	06	64**		
27. PB	51**	43**	-00	50**	48**	57**	59**	53**	55**	52**	-09	-06	-12*	41**	59**	55**	62**	-11*	-06	-11*	-08	-11*	-08	-03	61**	40**	

Correlation coefficients are obtained as the number given in the cells divided by 100, * p≤.05, ** p≤.001, *** p≤.0001

SV=Shared vision, C=Compassion, OPM=Overall positive mood, RT=Risk-taking, INI=Initiation, INN-Innovation, CA-creation and acquisition, TS=Transformation and storage, FI=Feedback and improvement, DU=Dissemination and usage, TI=Total involvement, CI=Continuous improvement, TR=Task-reflexivity, OS=Organic structure, OC=Open communication, AT=Affective trust, CT=Cognitive trust, CI=Continuous learning, ID= Inquiry and dialogue, CTL=Collaboration and team learning, ,ES=Embedded systems, EMP=Empowerment, SC=Systems connection, SL=Strategic leadership, FB=Functional benefits, EB=Economics benefits, PB=Psychological benefits

5.1 Evaluation of hypothesized model using SEM

The data was subjected to normality condition that is regarded as mandatory for maximum likelihood procedure of structural equation modeling (SEM). Univariate normality of measured variables have been reported. Items reporting skewness and kurtosis value more than 0.7 were not considered for further analysis and were eliminated from the data set. Multivariate data is analyzed using structural equation modeling for the purpose of hypothesized theory development and testing (Bagozzi, 1980; Kline, 2005). The independent and dependent multiple variables are called as endogenous and exogenous variables respectively in SEM.

Since the responses were obtained from human respondents, therefore there is likelihood of measurement error, which may weaken the relationship between variables. In order to overcome the measurement error and improve the reliability and validity of measurement scales, multi item scales are preferred keeping in mind the classical theories to develop a stronger measurement instrument. Therefore, to establish hypothesized relationships, latent variable structural equation modeling (LVSEM) has been adopted. It addresses the measurement errors in the statistical model by having multiple indicators in a given construct. The constructs, which constitutes of several observed variables, are called latent variables. The observed variables are called manifest variables.

All the endogenous and exogenous variables defining complex casual relationships are tested using LVSEM. It measures both measurement and structural relationship and helps in controlling systematic and random measurement error. Improving the model fit indices through confirmatory factor analysis controls random error. Systematic errors occur due to common method bias, problems with scale, and response biases. Measurement errors can be controlled either procedurally or statistically. Procedural control was done by obtaining data on some variables like shared vision, compassion, overall positive mood, risk-taking, initiation, innovation, knowledge creation and acquisition, knowledge transformation and storage, knowledge feedback and improvement, knowledge dissemination and usage, organic structure, open communication, affective and cognitive trust, functional benefits, economic benefits, and psychological benefits from faculty members. Data for variables like total involvement, continuous improvement, task reflexivity, continuous learning, inquiry and dialogue, collaboration and team learning, embedded systems, empowerment, systems connection, and strategic leadership have been procured from directors.

Statistical control was done using LVSEM with observed variables loading on latent constructs. By considering highly reliable and valid measurement, common method bias can also be controlled (MacKenzie, 2001). Path analysis in SEM tests the hypothesized relationships as represented in the model. AMOS 21.0 software package has been used to analyze the data. The proposed hypothesized relationships have been shown (Figure 5.1). Variables depicting the constructs of total quality management and supportive learning culture have a significant relationship with learning organization. However, resonant leadership, intrapreneurship, and knowledge management have non-significant relationship with learning organization ($p = 0.211$, $p = 0.500$, $p = 0.352$ respectively). The standardized path coefficient for hypothesized direction of resonant leadership to learning organization, intrapreneurship to learning organization, and knowledge management to learning organization was 0.05. Also, learning organization has non-significant relationship with employer branding and it's standardized past coefficients for hypothesized direction of learning organization to employer branding was 0.269. Therefore, H_1, H_2, H_3, H_6 have been refuted. Hypothesis H_4 and H_5 were significant and had positive regression coefficients. An improved model is developed removing non-significant paths with hypothesis H_4 and H_5 (Figure 5.2).

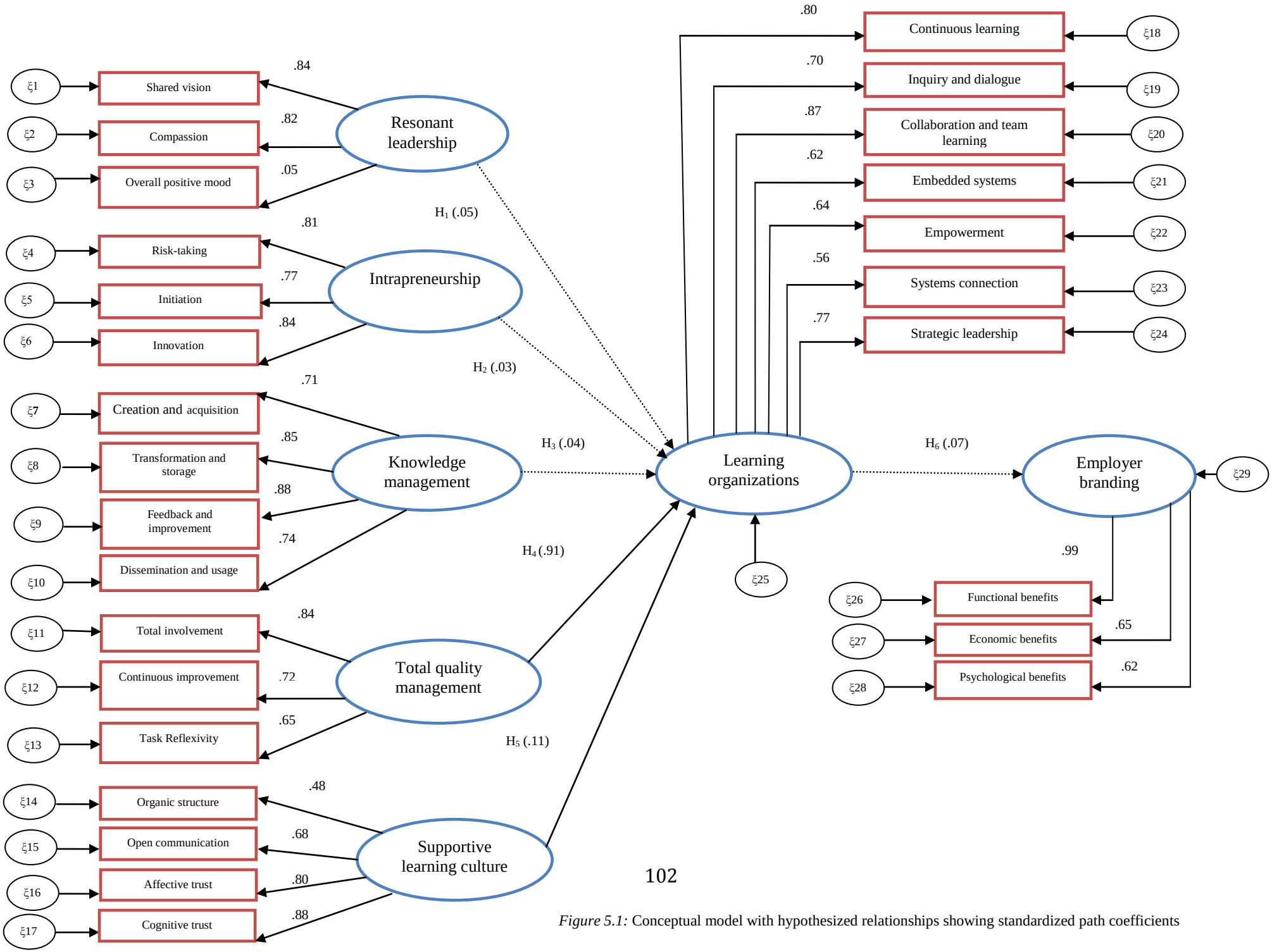

Figure 5.1: Conceptual model with hypothesized relationships showing standardized path coefficients

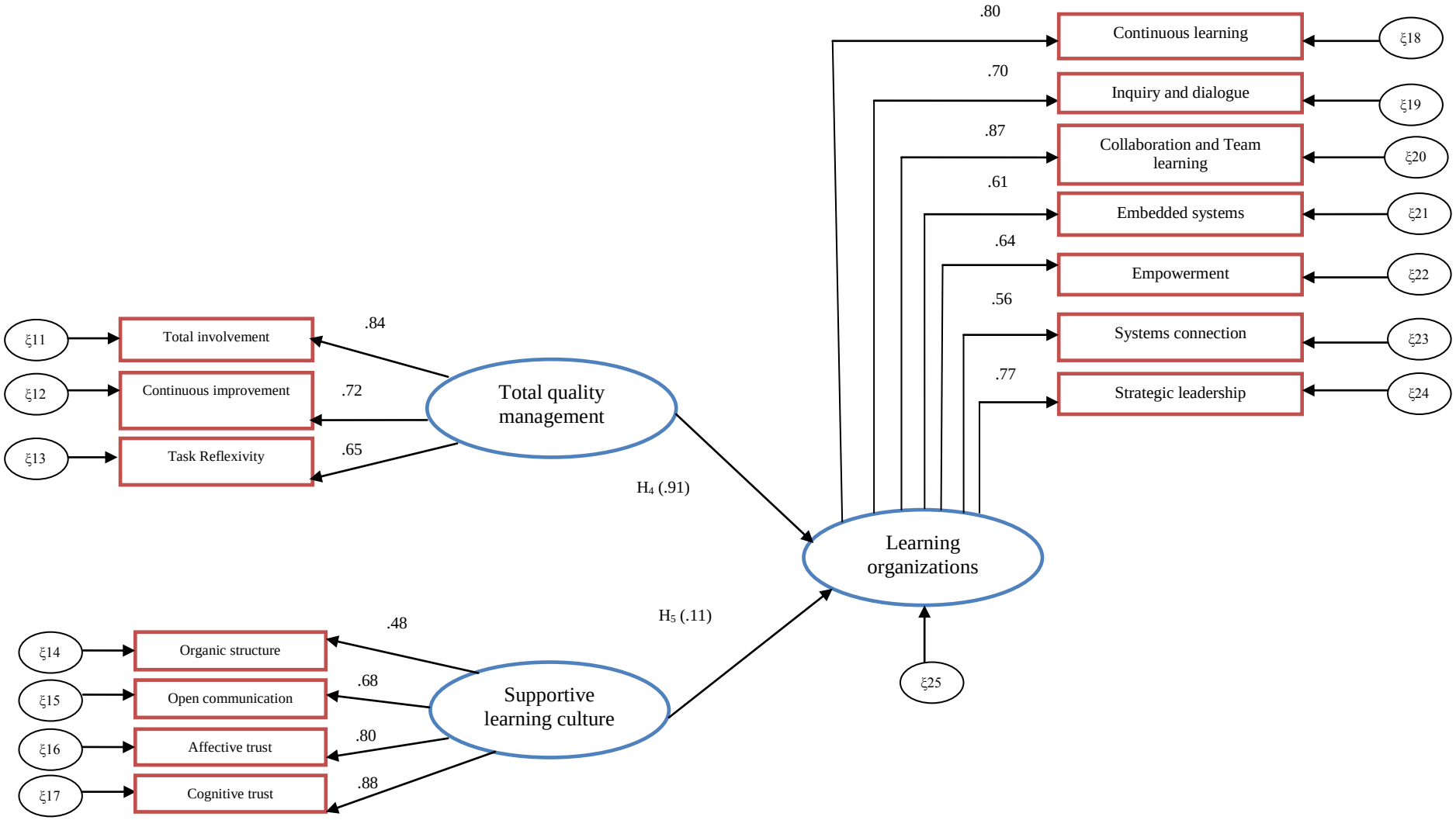

Figure 5.2: Improved model showing hypothesized relationships with standardized path coefficients

Fit measures of the hypothesized model have been provided in Table 5.2. Chi-square value has been found to be significant at $p < 0.001$. Non-significant values are desirable for similarity between observed model and model implied covariance matrices. Chi-square was highly sensitive to sample size, so, relative chi-square value has been estimated. The relative chi-square value of the hypothesized model was 6.90 and for the improved model was 3.03, which was close to the desired limit of 3 (Kline, 2005). Therefore, other fit indices have been calculated to assess the model fit. Five common measures are used to measure the goodness of fit. The measures and their recommended values are goodness-of-fit index (GFI > 0.90), adjusted goodness-of-fit index (AGFI > 0.90), normed fit index (NFI > 0.90), comparative fit index (CFI > 0.90), and room mean square of approximation (RMSEA < 0.08) (Hooper, Coughlam, & Mullen, 2008). CFI and AGFI signify overall fit of the model. GFI is similar to square multiple correlations in multiple regression. NFI accounts for the complexity of the model. Thus, CFI, GFI, and NFI are absolute fit indices closer to 0.90. Root mean square of approximation (RMSEA) also assesses model fit measure. Lower the value of RMSEA better is the model fit. RMSEA value in the model fulfils the desired limit of 0.08.

Table 5.2: *Fit Measures of Two Models*

Conceptual model	*($\chi 2$/ df)*	*GFI*	*CFI*	*NFI*	*AGFI*	*PGFI*	*PCFI*	*PNFI*	*RMSEA*
Hypothesized model	*6.90*	*0.62*	*0.63*	*0.60*	*0.55*	*0.52*	*0.58*	*0.55*	*0.14*
Improved model	*3.03*	*0.93*	*0.96*	*0.92*	*0.91*	*0.66*	*0.79*	*0.76*	*.059*

Next chapter-6 deals with the discussions.

CHAPTER-6

DISCUSSION

The present study has been conducted in management institutes selected on a random basis from 19 states of India. Faculty members and directors were respondents of the survey. The study assesses antecedent variables that influence the status of these institutes as learning organizations and how learning organizations would benefit the respective institutes. Total quality management and supportive learning culture are few antecedents that have a significant role in transforming these institutes as learning organizations. However, several other antecedent variables resonant leadership, intrapreneurship, and knowledge management have a non-significant relationship with learning organization. Consequently learning organizations also reported a non-significant relationship with an outcome variable employer branding. Results of this study have been broadly discussed in the following sections respectively.

6.1 Resonant leadership and learning organization

Our results show that resonant leadership has non-significant relationship with learning organization. Resonant leadership has been measured with variables: shared vision, compassion, and overall positive mood. In management institutes of India, formulating vision for the educational institute is considered to be sole propriety of top management and its representatives i.e. Directors/Deans/HOD's with minimal involvement of faculty members. The faculty members participate in meetings scheduled once or twice a year. These meetings are unidirectional where teaching and research objectives are directed to them. Management institutes in India are highly characterized by lack of shared vision. The reason for lack of shared vision in formulating teaching and research objectives is the prevailing power distance in Indian organizations. People in the higher rank have sense of superiority over their subordinates. The subordinates are also afraid to speak up to their seniors because of fear of criticism and thus always look up to seniors for guidance (Gupta & Singh, 2012). Therefore, there is hardly any equal participation of employees. In several institutes, faculty members do not have access to resources, research projects, reputed journals, and case studies for preparing teaching notes unlike the top management institutes in India. Funding for attending workshops and short-term programmes both in India/abroad is beyond the scope of many private management institutes. Despite an ambitious vision for management institutes growth and survival, still the leaders are not efficient enough to overcome these procedural bottlenecks which are crucial for transfer of learning from individual to organizational level. Leader is

overburdened with the task of framing action plans for survival of institutes in the clutter of competition. S/he is engrossed in administrative responsibilities and ignores the professional and personal development of individual faculty members, causing dissonance or unrest among them. Faculty members lack confidence in delivering lectures and in their research capability and experience a high degree of job insecurity. Directors do not facilitate developing their professional competence rather assign them more tasks from time to time. They don't promote research, instead ask faculty members to focus more on administrative responsibilities like: preparation of timetable, managing admission process of students, carrying out invigilation, managing hostels administration to name a few. Such responsibilities are burdensome for faculty members as it kills lot of creative potential. Moreover, faculty members are coaxed to teach subjects beyond their respective areas, which make them uncomfortable, as they do not have hold in that subject. They also pursue their faculty members to teach off campus without offering them monetary benefits.

The faculty members feel highly demotivated that results in poor performance and more of organizational detachment. They require emotional concern of their leaders along with their intellectual support, knowledge, and business acumen. This can only be provided if the head of the institute practices resonant leadership style. The leaders of management institutes adopt more of directive leadership style in order to survive the present competition in the sector rather than having a resonant leadership style. Thus, the variable resonant leadership has a non-significant relationship in the present study.

6.2 Intrapreneurship and learning organization

Our results show that intrapreneurship has non-significant relationship with learning organization. Intrapreneurship has been measured with variables: risk-taking, initiation, and innovation. Scenario of Indian management education is highly competitive. Burden lies on the head of the institutions to offer value added education programmes to prospective degree seekers. Their aim is to draw better talent pool as well as offer world class teaching experience, course material, and ambience for their overall development that can enhance employability skills of students. This requires faculty members to take initiative in redesigning course curriculum and develop cases for effective classroom teaching. It also requires them to take up live projects of industries for experiential learning of students and encourage their involvement in incubation and intrapreneurial activities. But in reality, the pay structure and HR policies of many management institutes in India are not consistent with pay structure defined by UGC/AICTE norms and are not in line with institute's vision and hallmark (Tomar & Dhiman,

2013). Above all, most of these institutes have a directive leadership style with minimal involvement of faculty members in decision-making. Their role is merely suggesting improvement in educational programmes and infrastructural development. Therefore, their sense of ownership towards their employer declines.

Faculty members are reluctant to take risk in R & D projects because of fear of failure. They are afraid that failures will reflect in their career advancement opportunities and position in the institute. Indians have a tendency of risk avoidance. They feel discouraged and demotivated in any unsuccessful effort. This leads to dependency on their supervisors for any task that amounts to risk. Therefore, faculty members take less initiative in developing innovative methods of teaching and designing new courses. Also, there is a wide division between institutes in private and public sector. More number of private institutes have been covered in this survey. Though, these institutes have exponentially grown in terms of infrastructure development, but in reality they are least bothered about professional growth of faculty members/support staff. The attitude of these institutes is not proactive towards development of intrapreneurial skills of faculty members. Few management institutes in India have actually adopted innovative methods of teaching and learning: audio visual aids and action learning techniques. However, majority of them still follow traditional methods of classroom teaching. Lack of qualified faculty members is a major barrier for the management institutes. They compromise on quality of education by offering employment to passing out graduates as faculty in the institutes. The inexperienced young faculties are hesitant to adopt innovative teaching methods and lack confidence.

Thus, the business model of many management institutes in India doesn't support their faculty members to take initiative, risks, and to adopt innovative teaching and research methods. Institutes in government sector enjoy privileges in terms of government funding. But the private institutes have to compete for their survival. Most of the private institutes do not have aid to expand their infrastructure for innovation and risk taking. Therefore, the variable intrapreneurship has been found to have non-significant relationship with learning organization.

6.3 Knowledge management and learning organization

Knowledge management is measured using observed variables like knowledge creation and acquisition, transformation and storage, feedback and improvement, and dissemination and usage. Our results did not support the influence of knowledge management on learning organizations. Faculty member's performance in management institutes is assessed based on

their competency in teaching, research, administration, and consultancy. They are expected to perform administrative tasks efficiently. The immense amount of workload hardly leaves any time for them to think out of the box. Therefore, their research output is minimal. Moreover, these institutes discourage funding of national and international conferences/seminars/ workshops, which is a major impediment in their professional growth. Lack of exposure of faculty members is one of the reasons for their dismal performance in classroom teaching and research. They hardly get chance for collaboration and knowledge sharing. Secondly, these institutes focus mainly on infrastructure building with less emphasis on allocation of resources for basic and applied research and development. These activities consume a lot of time and money. Therefore, directors are not motivated enough to invest in full research and development. So, scope for knowledge creation and acquisition becomes narrow. However, this is not the case with few of the top management institutes in India as they invite academicians and industry experts for imparting guest lectures. But, there is little scope of knowledge sharing in all the management institutes because of competition, envy, job insecurity, and fear of losing their position. They also have fear of unknown factors, otherwise called as uncertainty avoidance, which is low in Indian organizations (Tripathi, Nongmaithem, Mitkovic, Ristic, & Zdravkovic, 2010). Faculty members in these institutes remain secluded and concerned for their own development. They are afraid to share ideas and knowledge with faculty fraternity both within and outside the institute. There is hardly any collaboration on writing joint papers, projects, and conducting conferences, workshops, and seminars.

Every institute has institutionalized knowledge in the form of library, which stores research projects, resources, and video lectures of well-known academicians and researchers. These knowledge repositories are not updated regularly. Knowledge sharing is poor in Indian organization, which is a barrier towards effective knowledge management practices. Therefore, the variable knowledge management has been found to have non-significant relationship with learning organization.

6.4 Total quality management and learning organization

The present research has confirmed the positive influence of total quality management in building a learning organization. In this study, the construct TQM consists of total involvement, continuous improvement, and task reflexivity. These variables have individual role in promoting learning in an organization. The process of TQM starts from the top

management level and then gradually permeates into the whole organization. Management institutes involve stakeholders: faculty members and administrative staff to improve quality of educational processes. The director ensures promotion of quality awareness among them, as it helps the members to take quality goals initiatives in teaching, research, administration, and consultancy. To meet stakeholder's expectations, institutes maintain quality practices by formulating appropriate quality policies, procedures, and manuals in teaching, research, administration, and consultancy. Every stakeholder has been assigned the duty in order to achieve quality benchmarks. These duties include quality circles, monthly audit to name a few. The institute also takes measures to improve quality of placements to ensure a better future for students. These days' parents are well informed and demanding. They want to send their children to the institute that provides quality education and maintains international standards. Even the prospective faculty members apply to the educational institute that maintains its quality standards in teaching and research.

Continuous improvement of core, internal, and external services of institutes is also a pre requisite to maintain quality standards. Core services are maintenance of classrooms, library, laboratory, activities room, and washrooms. Internal services are physical and support services of transportation, internet connectivity, hostel facilities, open-air theatres, and gymnasium. External services are telecom, post office, hospital, stationary shops, canteens, banks, and ATM-counters. Most of the management institutes in India have world-class infrastructure and physical evidence like campus layout, administrative building, seminar and convocation halls, and guesthouses. There is an equal effort given for improving the recruitment and selection procedures, pedagogy, computing facilities, physical and digital library, and teaching aids. The institutes are trying to regularly update their educational practices with benchmark institutes in comparison with top management institutes. Though, continuous improvement of processes, programmes, and activities helps in fostering a learning environment, but in reality, practical implementation is less feasible. Despite these shortcomings meetings are held on periodic interval to ensure constructive feedback from stakeholders to improve and review educational processes, teaching pedagogy, and research. This discussion in meetings where ideas are being reflected upon and decisions are made by the members is called as task reflexivity. Higher quality of education increases the ability of intrapreneurs to upgrade their institutes and enhance their capacity to grow and innovate (Hampel - Milagrosa, 2014; Hampel - Milagrosa, Loewe, & Reeg, 2015). These factors establish a learning environment as members learn with each other and from their past experiences. Thus, TQM ensures creating learning opportunities for stakeholders through their active involvement.

6.5 Supportive learning culture and learning organization

The present research has confirmed the positive influence of supportive learning culture in building a learning organization. However, the influence is less as compared to TQM. Supportive learning culture has been measured by organic structure, open communication, and affective and cognitive trust. It has been found in the survey, that few management institutes have flexibility in administrative rules, initiating new pedagogy and curriculum, introducing new courses, carrying out research projects, and organizing conferences, seminars, or workshops. This empowers faculty members. If the faculty is empowered they can work with enthusiasm and experiment newer ways of conducting teaching practices or organizing events. Institute gives them a free hand to express their creativity, take initiatives, and organize events without any procedural rigmarole. The flexibility provided by the institute promotes organizational level learning. However, most of the management institutes are yet to introduce flexibility in their routine structure. Faculty members of these institutes still follow the directions of top management. In these institutes, faculty willing to visit exchange programmes in foreign institutes or introducing a new course have to face hassles because of red tapism. Though, this is not a problem in the few other institutes that follow a routine procedure to accomplish the task in a lesser time. Also, there is a timely communication by management institute about strategic and administrative policies: student welfare, disciplinary actions, course curriculum, student's feedback on their classroom teaching, expected performance of faculty members on research parameters to promote learning culture in the organization. Open communication among faculty members generates trust among them. Interpersonal trust is expressed through listening and empathizing with each other. Learning is promoted in the institute if head of the institutes trust competence of faculty members and staff and send them as representatives to several forums: guest lectures, organizing events, and attending international exchange programmes. With top management's trust on faculty member's professional and cognitive competence results in their level of emotional bonding, commitment, and high level of engagement. Faculty members develop a sense of belongingness and involve more in learning activities. However, some of the institutes are not untouched by nepotism and favoritism. Top management extra ordinarily supports few faculty members for participating in events: symposium, conferences, and workshops. The favoritism is impediment in enhancing the learning capability of faculty members. Therefore, the present study has found a weak relationship between supportive learning culture and learning organization.

6.6 Learning organization and employer branding

The present study has revealed non-significant relationship between learning organization and employer branding. Institutes emerge as a strong employer brands by offering certain functional, economic, and psychological benefits to its employees. It has been found that majority of the management institutes do not have provisions for faculty development and foreign exchange programmes. They are also not very keen on updating faculty with latest pedagogy, teaching methods, and curriculum. Economic benefits are also not being provided to faculty members by making excuses of unavailability of funds. Thus, the faculty members experience dissatisfaction. Because of lack of promotional opportunities and shortage of funds faculty members develop a sense of insecurity among themselves. Envy, jealousy, and fear of losing their position generate an unhealthy competition. Limited opportunities for career growth in some of the management institutes, hinders their learning activities. Faculty members do not experience psychological benefit. They avoid working with each other for interdisciplinary research, which is an impediment in the learning process.

Though Peter Senge started with an ambitious concept of learning organization with an intention that these organizations would be an ideal place for employees to work and perform. But even after two decades, it has been realized that no organization can be transformed into an ideal organization. It is a western management concept and is difficult to materialize in a culture like India, which is characterized by high power distance and collectivism and low uncertainty avoidance (Hui & Triandis, 1986). High power distance among management and faculty reduces their involvement and participation in decision-making. People are low risk takers because of uncertainty avoidance. Though management institutes are viewed as learning institutes, but this learning is not directed towards continuous learning and development of faculty members and staff. Rather they emphasize on infrastructure development and physical ambience. But for a true learning organization, institutes have to emphasize on professional development opportunities for faculties and staff, provide motivation and support of top management, and instill a continuous learning culture. However, this is lacking in management institutes in India. Therefore, there is no significant relationship between learning organization and employer branding.

Next chapter-7 deals with epilogue.

CHAPTER 7

EPILOGUE

This chapter summarizes the findings of the present study to develop a theoretical framework of learning organizations, followed by managerial implications, scope for future research, and limitations.

7.1 Summary of findings

The present study investigated the enablers of learning organizations as: resonant leadership, intrapreneurship, knowledge management, total quality management, and supportive learning culture. So, that resulting learning organization can be considered as a prospective employer brand. Total quality management and supportive learning culture have been found to influence learning organization. However, the variables resonant leadership, intrapreneurship, and knowledge management have shown non-significant relationship with learning organizations. Consequently, the relationship between learning organizations and employer branding have also been found to be non-significant. After liberalization and opening of job avenues in MNC's, demand of management institutes have soared. Several new institutes have sprung up in a short span of time. So, the management institutes have invested a lot of money in developing a infrastructure: campus layout, administrative buildings, seminar halls, wifi campus, gymnasium, well-equipped library with e-resources, and smart classrooms. Their focus was to attract prospective students and increase student enrollments. A sudden surge in demand of management institutes has destabilized the student-faculty ratio. Though management institutes have developed infrastructure, but they are unable to find qualified faculty for the vacancies in these institutes. They compromise on quality by hiring graduating students of own institutes by offering lower salary, bypassing the standards set by AICTE/UGC norms. Though the institutes have an ambitious vision of promoting world-class teaching, learning, and research. They hardly meet these standards, because of practical problems they face in day-to-day life. These barriers are red tapism, power distance, equivocal approach for growth and development of faculty members, nepotism, favoritism, existing organizational culture, past practices or routines, and risk-aversive attitude of the institute towards research collaborations and intrapreneurial activities. These barriers create competency trap for the institutions. Therefore, to overcome competency trap an organization need to be guided by a strategic leader.

Table 7.1: *Summary of Findings*

Hypotheses	*Results*
H_1: Higher the influence of resonant leadership, higher would be the learning in the organization.	Resonant leadership style didn't influence the building of a learning organization.
H_2: Higher the intrapreneurial ability of faculty members, higher would be learning in the organization.	Intrapreneurship didn't influence the building of a learning organization.
H_3: Higher the influence of knowledge management, higher would be the learning in the organization.	Knowledge management didn't influence the building of a learning organization.
H_4: Higher the influence of total quality management, higher would be the learning in the organization.	Total quality management including: total involvement, continuous improvement, and task reflexivity, influenced developing management institutes as a learning organization.
H_5: Higher the influence of supportive learning culture, higher would be the learning in the organization.	Supportive learning culture including: organic structure, open communication, and affective and cognitive trust, influenced developing management institutes as learning organizations.
H_6: Higher the influence of learning organization, higher would be the employer brand.	Learning organization did not influence developing management institute as an employer brand.

7.2 Theoretical framework

The dynamism in the business environment caused by flurry of changes in government policies and rising demand for practicing managers by the industry drives organizations to transform their existing business model. They need to learn, adapt, and change, which is similar to Kurt Lewin's process model (Lewin, 1947). In such a scenario in order to retain global competitive ranking or to attain a benchmark standard, institutes are vying to develop dynamic capabilities. The dynamic capability can be accrued, if an institute adopts a continuous learning orientation with an emphasis on individual, team, and organizational level learning. So, the learning can be institutionalized and serve as a competitive advantage. The concept of learning organization has gained momentum to provide an organization a reputation of employer brand in a clutter of competitive challenges from mushrooming growth of educational institutes. However, in the process of transformation to a learning organization, there are several impediments like

unlearning the past practices, relearning the forgotten concepts, and learning new knowledge, which requires the organization to provide an atmosphere conducive for learning.

Enablers of learning are resonant leadership, intrapreneurship, knowledge management, total quality management, and supportive learning culture. But in reality, resonant leadership, intrapreneurship, and knowledge management have not supported the proposed relationship with learning organization. Total quality management and supportive learning culture have supported the proposed relationship with learning organization. Learning organization in turn has no relationship with employer branding. Overall, the purpose of developing a holistic model of learning organization has been defeated in the current sample. The concept of learning organizations is in a budding stage and is yet to get acceptability. The idea of learning organization has been adopted by western management practitioners (Garvin, 1993; Senge, 1990; Watkins & Marsick, 1993). In Indian context, learning organizations is still an ideal concept. The reason being cultural differences between western countries and India. As per Hofstede's cultural framework given in the year 1980, these cultural dimensions are power distance, collectivism, masculinity/feminism, long term/short term orientation, and uncertainty avoidance. Power distance is the hierarchal difference between job positions. Collectivism is the ability to work in teams. Masculinity is the aggression on competitive spirit prevailing in an organization. Long-term orientation is giving more importance to future. Uncertainty avoidance is risk-averse attitude. India is vertical collectivistic country, high on power distance, moderate on masculinity and long-term orientation, and low on uncertainty avoidance (Hui & Triandis, 1986). National culture reflects its imprints in the working style of employees in organization. Therefore, management institutes in India have high power difference between Directors/Deans/HOD's and their faculty members. Faculty members hardly get any chance to voice their concern in management decisions. It is a kind of unidirectional relationship between management and faculty members. The industry of higher education is viewed as a learning institution, but this learning is not directed towards continuous learning and development of faculty members and staff. In order to truly become a learning organization, institutes have to emphasize on providing professional development opportunities to staff and faculties. This requires constant motivation and support from top management. But in reality these basic purposes are defeated as the institute's vision is lost in the clutter of competition. They only focus on infrastructure building and development of core, internal, and external services like classroom maintenance, library, laboratory, activities room, and washrooms, support services of transportation, internet connectivity, hostel facilities, open-air theatres, and gymnasium; external services of telecom, post office, hospital, stationary shops, canteens, banks, and ATM-

counters. The institutes have ignored attracting and developing quality faculty to execute educational programs.

7.3 Managerial Implications

Overall, the theoretical framework contributes to the existing body of knowledge on learning organization by emphasizing the role of management institutes of India in developing as a learning organization.

- This study will guide academicians and practitioners to unearth some major barriers of learning in developing their institute as a learning organization.
- This study would also help policy makers to upgrade management curriculum as per needs of industry.
- Learning organization practices may help the institutes to integrate shared vision, mission, and strategy that would help to create innovative teaching and research practices to aid existing curriculum.

7.4 Agenda for future research

- The proposed theoretical framework can be studied in primary, secondary, and higher secondary schools. The same framework can also be tested in other service as well as manufacturing industries.
- Strategic leadership style of head of the institutes can be proposed as an enabler of learning organization.
- Comparison between public and private educational institutes can be done on several dimensions of learning organization to assess the strengths/weaknesses of these institutes. Some more dimensions of learning organization need to be ascertained by interviewing academicians who have served in administrative capacity in leading management institutions.
- Further research can be carried out by taking a larger sample size to generalize the findings of this study.
- Impact of dimension of national culture on the proposed cause and effect relationship, need to be studied in future.
- There is need to conduct study in the states where a large number of management institutes have closed down. Future study should focus on improving the student enrollment in disciplines like education, medicine, law, and others.

- Personality factors of faculty members can also be studied in future.

7.5 Limitations

- Survey has been conducted in management institutes of India. It can further be extended to other institutes of higher learning and schools imparting primary, secondary, and higher secondary education.
- Students, staff, and other stakeholders like management representatives, senate members, and members of Board of Governors have not been included in the present study.
- Impact of variables like system, strategy, and environment have been ignored in the present study.
- 74 percent respondents in the present survey were heads of the department. In future, we can only take responses of directors because HOD's have certain limitations in executing their power and giving unbiased responses.

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LIST OF PUBLICATIONS FROM PRESENT RESEARCH

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2. Lenka,U. & Chawla, S. (2015). Higher educational institutes as learning organizations for employer branding. *Industrial and Commerical Training, 47(*5), 265–276. (Emerald).
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4. Chawla,S, & Lenka,U. (2012). Role of transformational leaders in developing higher educational institutes as learning organizations-An Indian perspective. *Global Journal of Finance and Management, 5* (10), 30–33.

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1. Chawla,S, & Lenka,U. Resonant leaders: An impetus to change the organizations. *Development and Learning in Organizations (Emerald).*
2. Chawla,S. & Lenka,U. Learning organizations as a source of sustained competitive advantage for strong employer branding. *International Journal of Human Resources Development and Management (Inderscience publishers).*

PAPERS PRESENTED IN INTERNATIONAL CONFERENCES

1. Chawla,S. & Lenka,U. (2015, March). Learning organization-A strong employer brand?. International conference on trends in economics, Humanities, and Management. ICEHM, Singapore.
2. Chawla,S, & Lenka. U. (2015, February). *Developing Indian higher educational institutes as learning organizations through the practice of intrapreneurship*. 3rd International conference on creating opportunities in emerging markets-A global approach. Symbiosis centre for management studies (SCMS), Noida.
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APPENDIX-A

Department of Management Studies
Indian Institute of Technology Roorkee, Roorkee
Phone: Tel: 01332-285014, 285617
Fax: 01332-285565

Letter from Supervisor,

To whosoever it may concern

This is to certify that Ms. Saniya Chawla, a registered scholar of Department of Management Studies, IIT Roorkee is conducting a study on enablers of learning organization- A case of management institutes in India. Therefore, she needs to interact with faculty members and directors. This study is part of her PhD thesis and the responses would be kept confidential. Kindly cooperate with her for the smooth conduct of the process.

Thanking you

Regards

Dr. Usha Lenka
Assistant Professor

APPENDIX-A

Department of Management Studies
Indian Institute of Technology Roorkee, Roorkee
Phone: Tel: 01332-285014, 285617
Fax: 01332-285565

Cover letter for questionnaire

Dear Respondent

This survey is strictly for academic purpose and the respondent's identity would be kept confidential. Therefore, I request your sincere participation in the survey that intends to investigate the enablers of learning at individual, team, and organizational level to build a learning organization. The faculty members and directors across the country would be participants in the survey that consists of parts A and B. Part A is to be responded by faculty members and part B by directors respectively.

I acknowledge my sincere thanks to you for your valuable and thoughtful responses.

Sincerely

Saniya Chawla
Research Scholar
Department of Management Studies
Indian Institute of Technology Roorkee
Roorkee- 247667
Uttarakhand

To be filled by the Faculty

Section I

Kindly fill the following details and √ appropriate responses in both section I and II

1. Gender: _____
2. Qualification: □ Post-Graduate □ More than Post-Graduate
3. Designation: □ Lecturer □ Assistant Professor □ Associate Professor□ Professor
4. Awareness of learning organization: □ Yes □ No

Section II

Statements	Strongly Disagree	Somewhat Disagree	Neither	Somewhat Agree	Strongly Agree
I. Our director					
1. Cares about our professional development.	**1**	**2**	**3**	**4**	**5**
2. Cares about out personal development.					
3. Likes when we accept constructive feedback.	**1**	**2**	**3**	**4**	**5**
4. Encourages interdisciplinary research to strengthen our knowledge.	**1**	**2**	**3**	**4**	**5**
5. Praises us in meetings to encourage us.					
6. Delegate's administrative responsibilities.	**1**	**2**	**3**	**4**	**5**
7. Has concern for us.	**1**	**2**	**3**	**4**	**5**
8. Always keeps his word.	**1**	**2**	**3**	**4**	**5**
9. Is competent in doing his job.	**1**	**2**	**3**	**4**	**5**
10. Trust our competence in organizing events such as conferences/ seminars/ workshops/ FDP's / MDP's.	**1**	**2**	**3**	**4**	**5**
11. Trust our competence of publishing in reputed journals.	**1**	**2**	**3**	**4**	**5**
12. Trust our competence in delivering guest lectures.	**1**	**2**	**3**	**4**	**5**
13. Trust our competence in attending international exchange programmes.	**1**	**2**	**3**	**4**	**5**
14. Provides vision for teaching, learning, and research excellence.	**1**	**2**	**3**	**4**	**5**

15. Ensures that our involvement in teaching and research is aligned with institute's overall vision.	**1**	**2**	**3**	**4**	**5**
16. Encourages us to attend conferences/ seminars/ workshops.	**1**	**2**	**3**	**4**	**5**
II. Our institute					
17. Encourages joint projects with other institutions.	**1**	**2**	**3**	**4**	**5**
18. Invites renowned academicians for lectures.	**1**	**2**	**3**	**4**	**5**
19. Invites faculty from other departments.	**1**	**2**	**3**	**4**	**5**
20. Facilitates networking with academicians/ industry experts.	**1**	**2**	**3**	**4**	**5**
21. Facilitates us to develop institute's R & D centers.	**1**	**2**	**3**	**4**	**5**
22. Promotes our involvement in incubation and intrapreneurship cell.	**1**	**2**	**3**	**4**	**5**
23. Encourages us to organize various conferences /seminars / workshops.	**1**	**2**	**3**	**4**	**5**
24. Encourages us to adopt audio-visual and action-learning techniques in teaching.	**1**	**2**	**3**	**4**	**5**
25. Encourages us to tactfully handle complex situations.	**1**	**2**	**3**	**4**	**5**
26. Encourages us to adopt innovative methods in teaching and research.	**1**	**2**	**3**	**4**	**5**
27. Encourages us to design innovative strategies to achieve institute's goals.	**1**	**2**	**3**	**4**	**5**
28. Adopts best practices in teaching, pedagogy, and research activities.	**1**	**2**	**3**	**4**	**5**
29. Adopts best practices in educational processes and practices.	**1**	**2**	**3**	**4**	**5**
30. Develops curriculum and pedagogy.	**1**	**2**	**3**	**4**	**5**
31. Encourages us to take risks while working in R&D projects.	**1**	**2**	**3**	**4**	**5**
32. Is concerned that failure will not demotivate us.	**1**	**2**	**3**	**4**	**5**
III. Our institute has a repository of					
33. Educational processes and practices.	**1**	**2**	**3**	**4**	**5**

34.	Research Projects.	**1**	**2**	**3**	**4**	**5**
35.	Video lectures and e-books.	**1**	**2**	**3**	**4**	**5**
36.	Faculty and student achievements.	**1**	**2**	**3**	**4**	**5**
37.	Working research papers and technical reports.	**1**	**2**	**3**	**4**	**5**
38.	Video lectures of well-known academicians and researchers.	**1**	**2**	**3**	**4**	**5**
39.	CD's of conferences/ seminars/ workshops.	**1**	**2**	**3**	**4**	**5**
IV. Our institute regularly updates						
40.	Teaching and research material.	**1**	**2**	**3**	**4**	**5**
41.	Educational processes and practices.	**1**	**2**	**3**	**4**	**5**
42.	Faculty and student achievements.	**1**	**2**	**3**	**4**	**5**
43.	Intranet for quick dissemination of campus news and information.	**1**	**2**	**3**	**4**	**5**
44.	Student's feedback about classroom lectures and pedagogy.	**1**	**2**	**3**	**4**	**5**
45.	Video lectures of well-known academicians and researchers.	**1**	**2**	**3**	**4**	**5**
V. Our institute has no procedural bottlenecks in						
46.	Examination pattern.	**1**	**2**	**3**	**4**	**5**
47.	Pedagogy and curriculum.	**1**	**2**	**3**	**4**	**5**
48.	Introduction of new courses.	**1**	**2**	**3**	**4**	**5**
49.	Carrying out sponsored research projects.	**1**	**2**	**3**	**4**	**5**
50.	Setting of labs.	**1**	**2**	**3**	**4**	**5**
51.	Dealing with financial issues.	**1**	**2**	**3**	**4**	**5**
52.	Organizing conferences/ seminars/ workshops /FDP's/ MDP's.	**1**	**2**	**3**	**4**	**5**
53.	Permitting guest lectures.	**1**	**2**	**3**	**4**	**5**
VI. Our institute clearly communicates about						
54.	Student feedback of teaching performance.	**1**	**2**	**3**	**4**	**5**
55.	Updated curriculum and pedagogy.	**1**	**2**	**3**	**4**	**5**
56.	Industry feedback.	**1**	**2**	**3**	**4**	**5**
57.	Strategic and administrative policies.	**1**	**2**	**3**	**4**	**5**

58. Teaching and research expectations.	**1**	**2**	**3**	**4**	**5**
VII. Our institute provides					
59. Learning of advanced technologies.	**1**	**2**	**3**	**4**	**5**
60. Faculty development program.	**1**	**2**	**3**	**4**	**5**
61. Fair promotion on seniority basis.	**1**	**2**	**3**	**4**	**5**
62. Fair promotion on merit basis.	**1**	**2**	**3**	**4**	**5**
63. Job security.	**1**	**2**	**3**	**4**	**5**
64. Foreign exchange programmes.	**1**	**2**	**3**	**4**	**5**
65. Competitive compensation package as per 6^{th} pay commission/AICTE norms.	**1**	**2**	**3**	**4**	**5**
66. Best faculty award/researcher award.	**1**	**2**	**3**	**4**	**5**
67. Funds to initiate research projects.	**1**	**2**	**3**	**4**	**5**
68. Incentives for being institute's representatives in examinations such as GATE, JEE, and campus interviews.	**1**	**2**	**3**	**4**	**5**
69. 24 hour electricity, internet connection, well ventilated classrooms, and teaching aids.	**1**	**2**	**3**	**4**	**5**
70. Flexible timings of class.	**1**	**2**	**3**	**4**	**5**
71. Student-teacher interactions.	**1**	**2**	**3**	**4**	**5**
72. Good relationships with director/head of the department.	**1**	**2**	**3**	**4**	**5**
VIII. My colleagues					
73. Feel a sense of loss if any of them is transferred.	**1**	**2**	**3**	**4**	**5**
74. Actively listen to each other's problems.	**1**	**2**	**3**	**4**	**5**
75. Can talk freely with each other about their difficulties.	**1**	**2**	**3**	**4**	**5**
76. Trust my teaching ability.	**1**	**2**	**3**	**4**	**5**
77. Carry out task with professionalism.	**1**	**2**	**3**	**4**	**5**
78. Dispense their task with responsibility.	**1**	**2**	**3**	**4**	**5**
79. Trust each other's research ability.	**1**	**2**	**3**	**4**	**5**

To be filled by the Director/Dean/Head of the department

Section I

Kindly fill the following details and √ appropriate responses in both section I and II

1. Gender: _____
2. Qualification: □ PhD □ Post Doctorate
3. Designation: □ Director□ Dean □ HOD
4. Type of Institution: □ Public□ Private
5. Awareness of learning organization: □ Yes □ No

Section II

Statements	Strongly Disagree	Somewhat Disagree	Neither	Somewhat Agree	Strongly Agree
I. Our institute encourages					
1. Faculty to pursue higher studies such as Post-graduation/PhD/Post doctoral.	**1**	**2**	**3**	**4**	**5**
2. Faculty to be committed to institute's vision.	**1**	**2**	**3**	**4**	**5**
3. Faculty to mentor and coach students.	**1**	**2**	**3**	**4**	**5**
4. Joint supervision of PhD students at inter-intra departmental level.	**1**	**2**	**3**	**4**	**5**
5. Faculty to take up joint courses.	**1**	**2**	**3**	**4**	**5**
6. Faculty to review teaching pedagogy and research.	**1**	**2**	**3**	**4**	**5**
7. Students to attend seminars/ conferences/ workshops.	**1**	**2**	**3**	**4**	**5**
8. Social welfare programs and activities such as NCC, NSS, and blood donation.	**1**	**2**	**3**	**4**	**5**

II. Our institute has a repository of latest

9. Teaching and research material.	**1**	**2**	**3**	**4**	**5**
10. Educational processes and practices.	**1**	**2**	**3**	**4**	**5**
11. Video lectures of academicians/ researchers/ industry experts.	**1**	**2**	**3**	**4**	**5**

III. Our institute encourages faculty to

12. Take initiative in R & D projects.	**1**	**2**	**3**	**4**	**5**
13. Go for exchange programs.	**1**	**2**	**3**	**4**	**5**
14. Update existing curriculum.	**1**	**2**	**3**	**4**	**5**
15. Take administrative responsibility of the institute.	**1**	**2**	**3**	**4**	**5**
16. Deliver guest lectures in other institutes.	**1**	**2**	**3**	**4**	**5**
17. Invite academicians from other institutes for guest lectures.	**1**	**2**	**3**	**4**	**5**
18. For industrial visits.	**1**	**2**	**3**	**4**	**5**
19. Attend conferences/ seminars/ workshops.	**1**	**2**	**3**	**4**	**5**
20. Update their technical knowledge/ know-how.	**1**	**2**	**3**	**4**	**5**
21. Carry out interdisciplinary research.	**1**	**2**	**3**	**4**	**5**

IV. Our institute gives feedback

22. To upgrade administrative processes.	**1**	**2**	**3**	**4**	**5**

23.	On current research practices.	**1**	**2**	**3**	**4**	**5**
24.	To improve ways of conducting conferences /MDP's/FDP's.	**1**	**2**	**3**	**4**	**5**
V. Our institute ensures						
25.	Participation of stakeholders to improve educational processes.	**1**	**2**	**3**	**4**	**5**
26.	Promotion of quality awareness among all employees.	**1**	**2**	**3**	**4**	**5**
27.	Quality goals initiatives in teaching, research, administration, and consultancy.	**1**	**2**	**3**	**4**	**5**
28.	Improving quality of placements.	**1**	**2**	**3**	**4**	**5**
29.	To imbibe value of quality excellence among stakeholders.	**1**	**2**	**3**	**4**	**5**
30.	That quality documents are well maintained.	**1**	**2**	**3**	**4**	**5**
31.	That procedures and manuals have quality standards.	**1**	**2**	**3**	**4**	**5**
32.	Employees maintain quality in their tasks.	**1**	**2**	**3**	**4**	**5**
VI. Our institute recognizes faculty collaboration in						
33.	R & D projects.	**1**	**2**	**3**	**4**	**5**
34.	Organizing conferences/seminars /workshops /FDP's.	**1**	**2**	**3**	**4**	**5**
35.	Developing teaching pedagogy and curriculum.	**1**	**2**	**3**	**4**	**5**

VII. Our institute gets feedback from stakeholders to					
36. Upgrade existing management functions.	**1**	**2**	**3**	**4**	**5**
37. Improve quality of educational processes, teaching pedagogy, and research.	**1**	**2**	**3**	**4**	**5**
VIII. Our institute improves quality of					
38. Transportation, Internet connectivity, hostel facilities, open-air theaters, and gymnasium.	**1**	**2**	**3**	**4**	**5**
39. Telecom, post office, hospital, stationary shops, canteens, banks, and ATM counter.	**1**	**2**	**3**	**4**	**5**
40. Classrooms, activities room, laboratory, library, and washrooms.	**1**	**2**	**3**	**4**	**5**
41. Gardens, campus layout, administrative building, and seminar halls.	**1**	**2**	**3**	**4**	**5**
42. Recruitment/selection procedures of faculty/staff/students.	**1**	**2**	**3**	**4**	**5**