# SPIRITUALITY CLIMATE & ITS IMPACT ON LEARNING IN TEAMS

A thesis submitted to

## Tilak Maharashtra Vidyapeeth, Pune

## For the Degree of Doctor of Philosophy (Ph.D.)

## In  Human Resource Develoment
## Under the Board of Studies
## Management

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## Submitted By
## Kalindi Bhat
## Under the Guidance of
## Dr. Indira Parikh

## September  2014

# DECLARATION

I here by declare that the thesis entitled '***Spirituality Climate and it's Impact on Team learning'*** is completed and written by me has not previously been formed as the basis for the award of any Degree or other similar title upon me of this or any other vidyapeeth or examining body.

Place :- Pune

Date :-                                                     **Signature  of  Research Student**

                                                                          Kalindi Bhat

# CERTIFIACTE

This to certify that the thesis entitled '***Spirituality Climate and it's Impact on Team learning'*** which is being submitted herewith for the award of the Degree of Ph.d in Management of Tilak Maharashtra Vidyapeeth in Pune , is the result of original research work completed by Kalindi Bhat under my supervision and guidance. To the best of my knowledge and belief the work incorporated in this thesis has not formed the basis for the award of any Degree or similar title of this or any other university or examining body upon her.


Place:                                                          Signature of the Research Guide

Date:                                                                    **Dr. Indira Parikh**

# Acknowledgement

*!!! Shree Ganeshaya Namah  shree Gajanan!!!*

It gives me immense pleasure to present this thesis entitled " Spirituality climate and it's impact on learning in teams.

I take this opportunity to express my deepest gratitude and heartfelt thanks to Dr. Indira Parikh, my Research Guide, for her continuous mentoring . co-operation, support, and for giving me valuable insights.

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I am also very much indebted and grateful to  the entire  team  of  Tilak Maharashtra Vidyapeeth for their timely support and encouragement.

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 I would dedicate this thesis to and appreciate all the support by my family, my mother-in-law Smt. Kumudini Bhat, my husband Mr. Kartik Bhat.

Thank you all.

**Mrs. Kalindi Bhat**

# INDEX

# Spirituality Climate and Learning in Teams
## (Business Organizations)

**Abstract:**

**Title:**

Impact of Spirituality Climate on learning in teams.

**Context:**

Spirituality refers to existential search for meaning and purpose of human life and its role and feeling of linkage within the larger scheme of existence.

The need for this study lies in the fact that people in most of the cultures in different parts of the world had spiritual quest. Newly emerging realities of human civilization posit the need for fresh discourse, empirical enquiry and theorizing this field in general and in the context of management of business organization in particular.

**Current Status of Knowledge (Earlier Work) in the Field of Spirituality in Management**

The field of management had never been totally blind to spiritual perspective of work. Quatro (2004) posits this point referring to the writings of Follet (1918) and Greenleaf (1970) in the classical management literature.

In 1918 Mary Parker Follet wrote that;

"When human being work together in organization harmoniously with their talent and in spite of their distinctiveness, in interdependent and interconnected way it is witness to a visible manifestation of "God".

Weber also (1956) called for developing the management theories and practices de-emphasizing materialism and individualism.

In more recent years, Nicols (1994) in Harvard Business Review, raised the issue of spirituality by emphasising importance of finding meaning in day to day work and wrote that:

"Companies must find ways to harness soul searching on the job, not just gloss over or merely avoid it".

In 1997 Academy of Management (U.S.A) has setup an interest group on spirituality and religion at workplace. Many academic journals like the *Journal of Management Education* (2005, 2006), *Journal of Organizational Change Management* (1999, 2002), *Leadership Quarterly* (2005), *Organization* (2004), *Journal of Social Economics* (1996, 1998), *Pfeiffer annual of training and consulting* (2004) etc. have brought special issues or published articles on different aspects of spirituality. Many terms like divinity, soul, 'managing with love' and 'rediscovering the soul' have started appearing in contemporary management academic and popular literature. Academic management researchers, management consultants and gurus, and practising CEO's have all written about it.

Zohar and Marshall, (2004) have mentioned in their book 'Spiritual Capital: The Wealth We Can Live By' wrote that:

"Corporate spirituality may well shape the organization of the future".

Organizations and groups like 'Spirit at Work' (www.spiritatwork.org) and Global Dharma Centre (www.globaldharma.com) are tirelessly propagating the ideas of spirituality at work for last many years in different parts of America, Europe, and Asia.

Impact of spirituality in the business organization has been studied in terms of job behavior of the employees and overall organizational performance. The literature correlating workplace spirituality related factors with employees' job behavior converge into three areas (Jurkiewicz and Giacalone, 2004);

- o    motivation,
- o    commitment, and
- o    adaptability

Study of Scott (2002) demonstrated that organizations high on spiritual values, outperform those without it, on the parameters of growth, efficiencies, and returns on investments than those without it. Nur (2003) in his doctoral research work reported that organizations managed by spiritual virtues (MBV's) earned better returns in the duration of 5 years.

There are conceptual studies suggesting the linkage between spiritual values in organizational (e.g orientation towards giving, acceptance of diversity etc.) and increased employee enthusiasm, effort, collaboration, creativity, and performance (McKnight, 1984).

Some conceptual studies suggest (Dehler and Welsh, 1994; Howard, 2002) that employees in organizations with higher levels of spirituality exhibit following characteristics:

- o   increased adaptability towards organizational change
- o   higher creativity,
- o   innovation and
- o   better learning capabilities.

**Research Gap**

Our review suggests that Predictive studies examining association of spirituality with organizational performance outcome are very few. There is no study empirically examining the impact of spiritual climate and its impact on team learning,

**Theory and Hypothesis Development**

Learning and spirituality both have evolutionary and transformative elements. Transformation in perspective is the central process of adult development (Dirkx, 1998, Mezirow, 1991). As living systems, we humans learn what matters for our growth. On a practical level, the energy for learning can be instrumental, stemming from the desire to do something in the world that matters to us (Shank & Cleave, 1995). 'Search for meaning and purpose', social aspect of learning (Bandura, 1986) and concern for larger positive impact is found to be associated with enhanced learning. We operationalize these notions at group level and hypothesize that:

**Main Hypothesis: Spiritual climate has positive associations with learning in teams.**
**Null Hypothesis: There is no significant positive association between spiritual climate and learning in teams.**
Based on three dimensions of spirituality climate construct (Pandey ,Gupta 2009) three sub Hypothesis were developed

**H1:** **The spiritual climate signified by 'harmony with self has positive association with Learning in teams**

**H2:** **The spiritual climate signified by Harmony in team environment is positively associated with learning in teams**

**H3:** **The spiritual climate signified by transcendence is positively associated with learning in teams.**

**Objectives of research:**

In the light of the current status of scientific enquiry in the area, the objectives of this study are as follows:

**Primary Objective:**

- The objective is to study the impact of spiritual climate on team learning.

**Secondary objectives:**

- To revalidate construct used to measure spirituality climate.
- To design and validate construct for learning in teams.

**Scope of the study**

The present investigation was carried out to establish association of spiritual climate with team learning. The focus of the study is on business teams in business units irrespective of size, sector, location or any other possible variables with regards to business organization. Therefore, sampling unit in this study is a team and specifies the size & characteristics of team instead of organization. The study hypothesized that spiritual climate of the team have impact on team learning.

Pandy (2009) has developed and validated the inventory to assess spiritual climate of the business teams. The inventory can be adopted for the present study as the study is planned in the same cultural setting. However, the study proposed revalidation of the inventory to check its suitability for study population. The study also proposed development and validation of construct for learning in teams. The relationship between spiritual climate and team learning behavior will be explored in the present study using statistical analysis tools.

**Research Methodology**

In this study spiritual climate is antecedent construct (input), learning in teams , is the consequent construct (output).

The research is primarily conducted with survey method.

Questionnaire-based cross-sectional survey design will be used to collect data from employees of different organizations.

Following instruments will be used to assess the above stated constructs:

- o   Spiritual climate scale published in Pfeiffer annual of consulting, 2009
- o   Learning   in teams assessment questionnaire.

This study is based on the positivist paradigm of social science. Deductive procedure of falsifying hypotheses is adopted as cognition process. Two constructs between which a positive relationship is proposed are assumed to be constituted of several sub-constructs or variables. The design involved the validation of spiritual climate scale, development of learning in team inventory and to examine the association of these construct at sub variable level. Both the constructs being of macro-level the unit of observation was the work group.

**Study setting**

The study was conducted in Pune city, India in 2011-2012. Nearly fifty years since the first few large manufacturing units set up base in and around Pune, the city has grown into one of three major industrial hubs in the country. While its proximity to commercial capital Mumbai has certainly played a role in it achieving this status, and factors like availability of trained manpower and salubrious climate have added favourable weight, of equal value is the fact that both industrial infrastructure and real estate development have also kept pace.Pune has surpassed Bangalore as a hub for high-end engineering design and product development work done out of MNC firms' R&D outposts

**Study design**

Questionnaire-based cross-sectional survey design was used which according to Rubin & Babbie, (2005) suits the aim of describing and measuring a larger population.

**Sample selection**

Mahratta Chamber Of Commerce Industries & Agriculture ( MCCIA ) has been playing a significant role in accelerating the industrial and economic development of Pune region for more than seven decades now. It is one of the most active chambers of Commerce in India and has been instrumental in promoting number of institutions in Pune. MCCIA has continuously driven to make Pune a global business destination and has been catalyst for economic development of the region. catalyst for economic development of the region.

The authorities of MCCIA, were contacted and a list of organizations registered with them was procured. This list was treated as a sampling frame form which 50 organizations were selected randomly using computerized random number tables and They were invited to participate in the study. Nearly 27 organizations were ready to participate in the study however, actual data collection was possible only with 17 organizations due to availability of the team members at the time visit. The teams were included from this 17 organizations using following criteria.

**Data aggregation and analysis**

As we have theorized spiritual climate and learning in teams; both are group level phenomenon and proposed hypotheses targeted at the group level of analysis, consistent with other research in climate based on aggregation of perception of team members. (e.g. Schneider, 1994, Edmondson, 2002). In the present study, we utilized intra class correlations (ICCs: Bliese, 2000) which is commonly used test to justify aggregation to test the within-group similarity. The ICC(2) values, which provides an estimate of the reliability of the group means and is typically estimated with the use of mean squares from a one-way random-effects ANOVA (Kozlowski & Klein, 2000), ranged from 0.34 to .89 for different teams.

**Findings of the study**

Learning and spirituality both have evolutionary and transformative elements that refer to a fundamental shift in mind to be capable of creating the world we truly want. This study is aimed to explore the plausible relationship between spiritual climate and organizational learning.

A questionnaire based cross-sectional survey design was used. Data was collected for the present analysis in year 2011-12 from 34 teams from 17 business organizations.

The Spiritual climate scores were regressed with team learning scores.

**Table 11: Regression model for spiritual climate and learning**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | F Change | Sig. | Durbin-Watson |
|---|---|---|---|---|---|---|---|
| Harmony with Self | 0.427 | 0.183 | 0.155 | 0.307 | 6.706 | 0.01 | 1.367 |
| Harmony in Environment | 0.716 | 0.512 | 0.496 | 0.270 | 31.495 | 0.00 | 1.817 |
| Transcedence | 0.635 | 0.403 | 0.383 | 0.299 | 20.233 | 0.00 | 1.569 |
| Full Model | 0.730 | 0.534 | 0.535 | 0.257 | 13.636 | 0.00 | 2.179 |

*The Model Summary table is SPSS output, shown above, gives R, R2, adjusted R2, the standard error of estimate (SEE), F change and corresponding significance level, and the Durbin-Watson statistic*. In the regression model above (Table 11), learning of team is predicted from spiritual climate. Harmony with Self predicted 15.5 % variance in team learning. The association was significant at 0.01 level. Thus H1 '*harmony with 'self' in team climate positively related to learning in team*' is accepted.

The second dimension of spiritual climate i.e. Harmony in Environment predicted 49.6 % variance. The H2 '*harmony with environment in team climate positively related to learning in team*' is accepted as the model was significant at 0.001 level.

Transcedence was also significantly and positively associated with team learning which explained 38.3 % variance. Therefore H3 '*transcedence positively related to learning in team*' is accepted.

Among the dimensions of spiritual climate; Harmony in Environment was found to be strongest predictor of learning in teams having explained 49.6 % variance. The model was significant at 0.001 level. Association of transcendence and Harmony in Self with learning in teams was also significant but not as strong as the Harmony with Environment. This output shows that full model with overall spiritual climate scores explained maximum i.e. 53.5 % of

the variance in team learning for this sample. Overall findings substantiate our prediction about positive association between learning in teams and spiritual climate.

Preparatory analyses to assess psychometric properties of the two instruments, including Consistency reliability and discriminant validity of the scales. The results supported the Adequacy of all the measures for substantive analysis.

**Conclusion**

**The results show that the association of the aspects of spiritual climate, i.e. harmony with self, harmony in environment and transcendence with both aspects of learning in team; mutuality and collective reflection and experimentation are both positive and significant**.

In light of this comparison an association of learning and spirituality seems logical. However the questions related to levels of learning (Argyris, 1978, Bateson, 1973) and role of spirituality at different levels still remains an interesting area for further enquiry and exploration.

**SPRITUAL CLIMATE AND its IMPACT ON LEARNING IN TEAMS (Context: Business Organizations)**

## INTRODUCTION

Along with trends of emerging importance of values and ethics in management and social responsibility of corporations, spirituality in management (Khandwala, 2008) is gaining recognition in management scholarship as well as practice. There is increasing emphasis of ideals like nurturing whole self at work (e.g. Moxley, 2004) that includes spiritual and emotional aspects along with physical and intellectual aspects. Oswick (2009) compared the two 10 year periods ending in 1998 and 2008 and found that the number of books on workplace spirituality increased from 17 to 55 and the number of journal articles increased from 40 to 192. Karakas (2009) reviewed the literature and found 70 definitions of spirituality at work. Most definitions make the distinction between religion and spirituality. Spirituality is described as search for wholeness reflected in responsibility (Drucker, 1986 in Fernandez, 2009). The most prominent concepts in literature of spirituality in management are search for meaning and purpose in our life (Ashmos and Duchon, 1998, Mitroff and Denton, 1999), experience of oneness (Russel, 1992, Krishnan, 2011). Spirituality in management is also referred to as meaning giving intelligence (Zohar and Marshall, 2004) is gaining an increasing visibility in organizational studies (Cunha, Rego and D'Oliveira, 2006). Giacolone & Jurkiewics (2010) provide the following definition: "Aspects of the workplace, either in the individual, the group, or the organization, that promotes individual feelings of satisfaction through transcendence. which means that, the process of work facilitates employee's sense of"being connected" to a non-physical force beyond themselves and provides feeling of completeness and joy."

In the past few years there has been a growing interest in workplace spirituality, in part due to what some are calling "a spiritual awakening in the American workplace" (Garcia-Zamor, 2003, p 355). Since the late 1990s publications such as Wall Street Journal, Business Week, and others have reported a growing desire among employees seeking meaning and purpose at work, a spiritual dimension of organizational life. Anecdotal evidence suggests that work places differ in terms of their commitment to building and nurturing people's spirits (Kolodinsky et al. 2003; Pfeffer, 2003) yet little is known, empirically, to support these

claims. Further, the interest in workplace spirituality has led to the assertion that workplaces that are "spiritually healthy" (White, 2003), most likely perform better (Elm, 2003; Garcia-Zamor, 2003) and are, in part, a function of the attitudes, practices and behaviours of workplace leaders (Fry, 2003; Pfeffer, 2003; Strack et al., 2002).Spirituality at work is about searching for meaning or higher purpose (Duchon and Petchsawang, 2012), connectedness (Povlovich and Corner, 2009) and transcendence (Vandenberghe, 2011).  There is a significant increase in the spirituality in management in last two decades amongst practitioners and scholars (Saks, 2011). Spirituality is an important factor for assisting individuals within organizations to maintain inner and outer balance. The basic entities of existence—the body (physical), the mind (logical/rational thought), the heart (emotions/feelings), and the spirit—are like the four corners of a table." The table will be in danger of falling over if one corner is missing (Moxley, 2000)".

Microsoft's new CEO, Nadella quotes "We need to believe in the impossible", and this starts with clarity of purpose and sense of mission that will lead us to imagine the impossible and deliver it. One needs to prioritize innovation that is centred on our core values of empowering users and organizations 'to do more".

Nadela, CEO of Microsoft, 2014 truly believes that each of us must find meaning in our work. He says the best work happens when one knows that it's not just work, but something that will improve other people's lives. This approach reflects the dimension of nurturing and flourishing workforce thereby increasing wellbeing which is possible to measure and can help make policy around wellbeing rather than just around money.

Variables proposed and examined in the literature, of "spirituality in management" are like meaningfulness, transcendence from immediate ego and individual concerns for larger self etc. echo the core of spiritual experiences like sense of interconnectedness or oneness. The individual and collective level manifestations of these variables are proposed as altruistic love, sense of community, authenticity and concern for social and natural environment etc. Many of these variables are found to be positively associated with work attitudes, (Pawar, 2008; Kolodinsky, Giacalone, and Jurkiewicz, 2008), effective leadership (Fry, 2004), job involvement (Pawar, 2008, 2009) organizational productivity (Fry et al., 2005), leadership (Fry, 2004, 2011) and work unit performance (Duchon and Plowman, 2005), positive customers experience (Pandey, Gupta and Arora, 2009) etc.

The current world of business is shaped by information revolution, globalization, knowledge and creativity, economy and environmental challenges. It is not a surprise that dealing with increasing complexity is identified as one of the most critical challenges to deal with in the corporate world (IBM CEO Global Survey, 2011). Senge (2000) predicted the emergence of new form of industrial revolution and discerned three elements of changes as harbinger of the new form of industrial revolution. The first element stems from seeing knowledge and knowledge creation as the cornerstone of competitive advantage and success of any organization. The second element is recognizing the organizations as embedded and interdependent with the larger natural and social systems. Third element is recognizing the necessity of running human collective system (not against) but as part of nature.

Corporations may choose to concentrate solely on legally maximizing profit, unconcerned about the long-term societal cost. Or, corporation, instead of just complying with the law, may choose to be socially responsible and being instrumental in the wholesome sustainable growth

Innovative work behaviour (Scott and Bruce, 1994), learning (Song et al., 2010, Hirst, Knippenberg, Zhou, 2009), creativity (IBM 2010 Survey) are identified as critically important factors to operate in current business environment. CEO survey findings corroborates with observation of Chamber et. al (1998) that corporations last longer than the average 40 years must be innovative, lean and they have to be learning environments. Knowledge creation and dissemination have emerged as corner stone of competitive advantage. Resource based view of firm emphasizes this point very clearly (Grant, 1996, Ramirez, Morales, Rojas, 2011). Imperative for a business organization is to be 'learning organization' (Song and Chermack, 2008)

Our study is primarily focused on how an individual finds himself at work and work environment in any organization. The central thesis is that human personality involves a spiritual aspect along with the physical, emotional and mental aspects. That is why nurturance or suppression of spirituality of human beings in work environment are likely to impact on learning of the workforce which may in turn affect performance , The study is designed to empirically test this relationship.

**Objectives**

Spirituality refers to existential search for meaning and purpose of human life and its role and feeling of linkage within the larger scheme of existence.

The need for this study lies in the fact that people in most of the cultures in different parts of the world had spiritual quest. Newly emerging realities of human civilization posit the need for fresh discourse, empirical enquiry and theorizing this field in general and in the context of management of business organization in particular.

In the light of the current status of scientific enquiry in the area, the objectives of this study are as follows:

- o Revalidating the existing spiritual climate scale
- o To test the impact of spiritual climate on team learning.

First, we attempt to differentiate spirituality from religion. Zinnbauer, Pargament, & Scott (1999) posit that both have the search for the sacred in common. In definitions on religion, quite often it is viewed as a covenant faith, community institution with beliefs ,and concepts to give the sacred a specific place in life and that encourages morality (e.g. Dollahite, 1998). Spirituality is usually associated with living by one's inner truth to produce positive attitudes and relationships in your life (Hawley, 1993). According to Giacalone & Jurkiewicz (2003) spirituality deal with the ultimate goal in life, the experience of a transcendent dimension that gives meaning to existence, and the capacity to experience the sacred. Spirituality has been characterized as "the search of the human being for meaning in his or her life" (Johnson, Bengtson, Coleman, & Kirkwood, 2005, p. 364). Emmons (2000a) defined it as "the personal expression of ultimate concern" (p. 4). King (2008) defined *spirituality* "as an unbound set of personal drives, behaviours, experiences, values, and attitudes which are based on a quest for existential understanding, meaning, purpose, and transcendence" (p. 51) Amram (2009) defined *spirituality* as "(a) focus on ultimate meaning, (b) awareness and development of multiple levels of consciousness, (c) experience of the preciousness and sacredness of life, and (d) transcendence of self into a connected whole" (p. 28). Spirituality has no class system or doctrine.  Spirituality can be characterized as a person's individual experience, without middlemen, of connection and oneness with God; however, an individual can have a sense of spirituality without a connection to the divine. This sense or connection facilitates the individual's search for their personal truths (Amram, 2007; Emmons, 2000a; King, 2008; Pargament, 2000). Religion is characterized by a class system that delineates the spiritual

leaders and followers and a doctrine, which is the shared beliefs of the classes. Conformity to the doctrine is required to gain acceptance into the religion (The Spiritual Naturalist, 1999).

Love (2002) represented religion based on (a) symbolism in the form of stories and representations that express the beliefs, (b) doctrine and dogma, and (c) quest for the higher or ultimate power. Spirituality, in contrast to religion, is the sense of connection that individuals seek to the Divine Source as a personal experience. "It's an inner voice and an inner harmony" (Rose, 2003). Fuller (2001) explained that spirituality and religion Both connote belief in a Higher Power of some kind, imply a desire to connect or enter into a more intense relationship with this Higher Power, and both connote interest in rituals, practices, and daily moral behaviours that foster such a connection or relationship. (p. 1) According to Van Dierendonck and Mohan (2006) when asked people associate religiousness usually with authoritarianism, religious orthodoxy, dogma, a closed community, and church attendance. Spirituality, in contrast, is associated with a focus on the essence of life, creativeness, spirit, mystical experiences, new age beliefs, and an aversion against clergy (Mitroff & Denton, 1999; Zinnbauer et al., 1997). In this view, religion has a strong institutionalized, community focus, whereas spirituality has a more individually, experiential focus. The rituals that are part of every religion are essentially meant to help the individual feel the presence of such a power and to give them a place in day-to-day living. To begin with, we will use the term spirituality to indicate a way of living that is not restricted to certain rituals or solely related to membership of a religion, although it can include that. Spirituality signifies the inner attitude of living life directly related to the sacred. This definition is directly related to what Pargament (2002, p. 169) calls the essence of spirituality, that is ''the process through which people discover, conserve and rediscover the sacred.''. Maslow (1970) believes in the naturalistic nature of spiritual values and claims that his theoretical investigations went far in demonstrating their reality. Maslow investigated individuals who had mystical or transcendent experiences. He argues that religions originate with the insights of mystical or peak experiences of individuals. He suggests twenty-five (25) features of peak (transcendent or mystical) experiences. Some of these features include the perception of the universe as integrated and whole where judgments and evaluations are suspended. Individuals lose connection to time and space, and the world is accepted as beautiful, worthwhile, and desirable. Feelings of wonder, awe, reverence, and humility are common; the conflicts of life are transcended, and there is a diminished sense of self. Life is often considered to be

worthwhile or meaningful and a "unitive consciousness" or a sense of the sacred is glimpsed during peak experiences (Maslow, 1970).

Management education is another area where spirituality has become an area of interest. Harlos (2000) examined definitions of spirituality in relation to teaching and learning. She suggests that despite the ambiguity and paradoxical nature of the various definitions of spirituality, the concept of values exists as a common element. Recognizing that spirituality can have both secular and sacred values, she suggests that spirituality can be conceived as "secular or sacred values aimed at transcendence toward our ultimate value" (Harlos, 2000, p. 615). She argues that peak experiences are examples of transcendent experiences where focus, creativity, joy, and detachment all collide. Harlos suggests that the values of humility, compassion, and simplicity should be considered to further the discussion of how spirituality and values can guide teaching.

**Current Status of Knowledge (Earlier Work) in the Field of Spirituality in Management**

The field of management had never been totally blind to spiritual perspective of work. Quatro (2004) posits this point referring to the writings of Follet (1918) and Greenleaf (1970) in the classical management literature.

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Some conceptual studies suggest (Dehler and Welsh, 1994; Howard, 2002) that employees in organizations with higher levels of spirituality exhibit following characteristics:

- increased adaptability towards organizational change
- higher creativity, innovation and
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**Research Gap**

Our review suggests that Predictive studies examining association of spirituality with organizational performance outcome are very few. There is no study empirically examining the impact of spiritual climate and its impact on team learning.

In this study spiritual climate is antecedent construct (input) and team learning is the on sequent constructing (output).The research is primarily conducted with survey method. Questionnaire-based cross-sectional survey design was used to collect data from employees of 34 different organizations.

Following instruments were used to assess the above stated constructs:

- o Spiritual climate scale published in Pfeiffer annual of consulting, 2009
- o Learning assessment questionnaire.

# REVIEW OF
# LITERATURE

# CHAPTER - 1

## RELEVANCE OF   SPIRITUALITY IN MANAGEMENT

In the field of management, the emergence of positive Organization Behaviour (OB) is contributing to this   research. Recent developments in areas like emotional intelligence (Goleman 1998), hope (Snyder 2000), self-efficacy (Bandura 1982, 2000) and optimism (Seligman 1998) are  the contribution  of  positive OB  movement (Luthans and Church 2002). On  the larger canvass, humanist  psychology  or  positive  psychology  strongly substantiates this  trend  in  management academics (Roberts 2006).

Management  academics  had  never  been  totally blind to the spiritual  perspective of work. Quatro (2004) posits  this  point  referring to the writings of  Follett (1918) and  Greenleaf (1970) in the   classical management literature. Weber (1958) also called for developing management theories  and  practices de-emphasizing materialism and   individualism. In more recent years, Nichols (1994)  in  Harvard Business Review, raised  the issue of spirituality by emphasizing that  companies must find ways to harness soul searching on the job, not just gloss over or merely  avoid it. The Academy of Management  (USA)  has set up an interest group on spirituality and  religion  at workplace. Many academic journals  like the Journal of  Management  Education (2005, 2006), Journal  of  Organizational  Change Management (1999, 2002), Leadership  Quarterly  (2005),  Organization ( 2004),  Journal  of Social Economics (1996, 1998), Pfeiffer  annual of  Training  and  Consulting (2004), and  so on, have  brought  out  special  issues or  published  articles  on different aspects of spirituality.

Approaches  in  management  at different  points of   time suggest  recognizing  different aspects of  'whole person' (Whole person refers to spiritual aspect of the  personality along with physical,  mental  and  emotional aspects.  ) social man,  a  mechanical  man,  emotional man  and  now  spiritual  man. Evolution  of  resources  based  view (Penrose, 1959)  to potential based  view  (Kalra, 1997, Zohar and  Marshall, 2004) of 'employees' signifies this point.

Petchsawang and Duchon (2012) consider spirituality a phenomenon that comprises of the four factors: compassion, mindfulness, meaning at work, and transcendence. Saks (2011) considered three factors , transcendence, community, and spiritual values as constituents of spirituality at workplace. Workplace spirituality is a new topic to organizational literature and is a topic with limited theoretical development (Dehler & Welsh, 2003; Fry, 2003; Giacalone & Jurkiewicz, 2003). However, we begin with a definition of workplace spirituality. A workplace can be considered to be spiritual (or spirit friendly) when it recognizes *that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community* (Ashmos & Duchon, 2000)

Newly emerging realities of human civilization posit the need for f resh discourse, empirical enquiry and theorizing on this field in general and in the context of management of business organizations in particular. In contemporary literature, spirituality has been defined in different ways: as intelligence, developmental line, attitude and inner experience. As intelligence, spirituality is defined by Zohar and Marshall (2000) as hyper thinking, meaning giving, contextualizing and transformative intelligence. This is considered as the foundation for the effective functioning of both Intelligence Quotient (IQ) and Emotional Quotient (EQ).

'Man' was initially conceptualized as one of the factors of production like machine. and material In the theory of scientific management theory 'man' was considered as instrument to accomplish different tasks in the most effective standardized way who works in the expectation of some incentive or piece- based wage (Acker and Preston,1997).

With the advent of human relation movement, 'relational aspects of man (personal attention, communication etc.) were recognized in the main stream management literature (Barnard, 1948). In the later years, peculiarity and criticality of human beings in comparison to other resources were better recognized in the resource-based view of the firm (Penrose, 1959, Lado and Wilson, 1994). Criticality of human resource is further established in the core competence literature as a source of competitive advantage of the firm (Prahlad and Hamel, 1990, 2004). The next milestone in industrial society's

evolution was the movement towards learning organizations is (Senge, 2000).workers orientation towards work has also transformed because of these changes which Daniel Yankelovich called an 'instrumental' view of work ( Instrumental' view refers to the work as a means to an end whereas 'sacred' view refers where people seek the 'intrinsic' benefits through the work.) to amore 'sacred' view. Gupta (1996) posed if there is any place for the sacred in the organization. Sacred views of work are the sign of corporate spirituality which may well shape the organization of the future (Zohar, 2004 Management field now is ready to think about nurturing the 'whole person' (Sheep, 2006).

Sharma (2004) suggested HOST model for integration of house, office, society and temple; which represent four main dimensions of life of modern man. Wakhlu (2006) writes about wholesome development' covering physical, relational, professional and spiritual aspects of human being. In the field of management education .Relevance of spirituality in the field of management is leadership. Leadership literature reflects on work related to 'values'. Chakraborty (1991) suggested leadership which incorporates spiritual, social values in performing job of a leader of Business Corporation.

Primal leadership (Goleman, 1995, 2002) Servant leadership (Greenleaf, 1970) emphasized a, personal development and shared decision making. Level five leadership (Collins, 2005), recent developments in transformational leadership (Kriger and Senge, 2005) all indicate human values of emotional intelligence, humility and spiritual awareness.. Pruzan and Mikkelson (2007) in his book trace the spirituality in leadership wisdom and practice based on the interviews of more than forty corporate leaders working in different parts of the world. Spiritual Leadership theory is getting place and acceptance in leadership literature. Spiritual leadership comprises the values, attitudes and behaviors required to intrinsically motivate one's self and others, in order to have a sense of spiritual survival through calling and membership. Spiritual leadership theory (SLT) is a causal leadership theory for organizational transformation designed to create an intrinsically motivated, learning organization (Benefiel, 2005, Fry, Vitucci, Cedillo, 2005). Kriger and Seng e2005) proposed and created an integrative model of organizational leadership based on inner meaning, leader values, vision and moral examples at multiple levels of being as an extension to prior behavior-based contingency theories of organizational leadership.

Emmons (2000) suggests that the components of spiritual intelligence are the capacity to transcend the physical and material, the ability to experience heightened states of consciousness, the ability to sanctify everyday experiences and the capacity to be virtuous. According to Emmons (2000), the construct of spiritual intelligence enables spirituality to be viewed as a quality that is more or less developed in different people and may be cultivated. Spirituality has also been defined as the highest level of any developmental line, the upper reach (Wilber 2004). For example, if we consider cognition, then the higher reach is trans-rational. It has also been considered as a developmental line in itself much like cognition, or affect or any other line of development like morality (Kohlberg and Ryncarz 1990) faith, (Fowler 1981) and so on. Spirituality has also been explained as inner experiences (e.g. Dillard 1982) and an attitude of openness, care or loving which can be practiced and developed (e.g. Miller 2004; Wilber 2004).

Graber and Johnson (2001) discussed the rationality of the spiritual dimension in organizational life. They concluded that the search for spiritual growth and fulfilment should not be separated from work because of the challenge of balancing personal, subjective, and unconscious elements of individual experience with rationality, efficiency, and personal sacrifices demanded by organizations. Other authors (Bickham, 1996; Conger, 1994; Marcic, 1997) also defended organizational designs that embody a sense of community and spirituality and discussed the leadership potentials of incorporating spiritual values into the management field. Bickham (1996) claimed that when spirituality is cultivated in the workplace, a creative energy is unlocked.

# CHAPTER - 2

## IMPACT AND BENEFITS OF SPIRITUALITY IN ORGANIZATION

Organizations that provide their employees with opportunities for spiritual development perform better than those that do not provide such development opportunities.

In general, spirituality positively affects :

- Organizational performance( Neck and Milliman, 1994)
- Increases creativity
- Satisfaction
- Team performance and
- Organizational commitment
- Promote the spiritual development of employees (Leigh 1997; Mirvis 1997; Brandt, 1996; McCormick 1994).

It is indicated in Several studies conducted in different parts of world that organizations high on spiritual values outperform those on the parameters of growth, efficiencies and returns on investments than those without it (Scott, 2002). Meta analysis of Dent, Higgins and Wharff (2005) showed the positive association of spirituality and productivity. Nur (2002) in his doctoral research work reported that organizations managed by spiritual virtues (MBV's) earned better returns in the duration of five years. Colvine (2006) in its analysis (in Fortune magazine) of 'Best Places to Work' in USA though does not use the word spirituality but writes that these are the places where people find a purpose to work other than their pay cheques.

Effect of spirituality at workplace can spill over into employees' home life, marriage, social interaction which in turn positively affects their work performance (Bromat, Dew and Parkinson, 1990; Jurkiewicz and Giacalone, 2004). At the individual level spirituality in the organization is reflected in the physical, mental and spiritual health of employee (Mackenzie et. al., 2000; Ipek, 2002). Marques (2005) suggested that spirituality result in unified pleasant performance and quality orientation of workforce which in turn result in excellent output and community orientation.

Employees who view their work as a 'means to advance spiritually' are likely to exert greater efforts than those who see it merely as a 'means to pay cheque' (Zinnbaur et. al., 1999) Positive effect of humanism and mutuality in organizational life are reported in the form of increased self esteem (Hewitt, 1998; Milliman et. al., 2001), hopefulness (Snyder, 2000), and optimism (Friedman et. al., 1998).Research shows that respect for employees increases their job satisfaction, resulting in less absenteeism, weakening the desire to unionize (Feldman and Arnold, 1983).Organizations that demonstrate mutual respect and show consideration and concern for others report decreases in stress, burnout, and turnover and concomitant increase in productivity (Adam et. al., 2003, Karasek and Theorell, 1990).

Studies show connection between spiritual values in organization (e.g. orientation towards giving, acceptance of diversity, etc.) and increased employee enthusiasm, effort, collaboration, creativity and performance (McKnight, 1984). Burack (1999) showed the positive impact of spirituality in management in the form of conscientious, continuing skill and knowledge advancement, adaptability and high sustained performance.

The literature correlating workplace spirituality related factors with performance converge into three areas; motivation, commitment and adaptability (Jurkiewicz and Giacalone, 2004). Organizational climate and culture with high levels of spirituality are reported to have a positive effect on employee motivation (Friedman et. al., 1998).Positive purpose is found to be positively associated with employees' motivation(Gragnolati and Stupak, 1997; Hart and Brady, 2005).

Workplace spirituality is also reported to enhance output at the team level performance by increasing the team motivation (Lovallo, 1997). Employees working in spiritual climate are found to exhibit greater persistence in overcoming obstacles in reaching goal (Schulman, 1999) and more creative in designing solutions (Salzmann, 1997). Spiritual leadership and transformational leadership literature consistently incorporates inspirational motivation as one of the variables (Pruzan and Mikkelson, 2007 Josephine, 2003).

Spirituality in the organization is suggested to be reflected in the quality of their offerings and service orientation of employees (Wagner-Marsh and Conley, 1999, Marques, Dhiman and King, 2005).

Employees of organizations with higher levels of spirituality are also more responsive to organizational calls to actions feeling they are serving a purpose rather than simply doing a job (Pandey and Gupta, 2008).Employees in organizations with higher levels of spirituality exhibit increased adaptability towards organizational change and show better learning capabilities (Dehler and Welsh, 1994; Salzmann, 1997; Wagner-Marsh and Conley, 1999; Howard, 2002).Attitude of employees in organizations with high levels of spirituality are found to be positive, supportive of the organization along with higher commitment than in organizations lacking in such values (Milliman*et.al.*, 2001; Pfeffer and Vega, 1999).

According to Campuzano et al (2009), spirituality promotes: "Employee success, and lead to self-actualization and employee satisfaction. A spiritual business organization increases employee satisfaction, the values of honesty, trust, respect, responsibility, and integrity. A spiritual business organization represents these shared values and as the leadership effectively demonstrates these values with behavior, actions and as these values are upheld throughout the organizational culture, employee satisfaction is increased" (Campuzano and Seteroff, 2009, p3). Also, Research is demonstrating a positive relationship between the presence of spirit at work and employee wellness as well as organizational performance (Kinjerski and Skrypnek, 2006). Spirit at work is reported to add meaning to one's life, enhance one's creativity, and increase one's commitment to and enthusiasm for work, An empirical relationship between spirit at work and job satisfaction, increased organizational performance including higher profits and success (Mitroff and Denton, 1999), increased organizational commitment, and decreased absenteeism and turnover is beginning to emerge (Kinjerski and Skrypnek, 2006).

Milliman, et al., (2003) have provided empirical support regarding the positive association between spirituality at work, as measured by meaningful work, sense of community, and alignment of values with the organization, and employee job outcomes such as organizational commitment, intention to quit, intrinsic satisfaction with work, and job involvement. According to Kinjerski and Skrypnek (2006) research, individuals with high spirit at work have reported that spirit at work has a positive effect on their personal wellbeing, relationships, consumer relations, and productivity. In particular, the results of high levels of spirit at work include: (a) individual wellbeing that overflows to other parts of life; (b) a positive effect on relationships, including a sense of community with those whom one works; (c) improved consumer service; as well as (d) increased productivity in

terms of the quality and quantity of work produced.. A spiritual business organization can be considered as the new competitive advantage since increased profits and performance has been representative of a spiritual business organization (Campuzano and Seteroff, 2009). Employees who demonstrate spiritual traits have a greater understanding to adapt to a changing environment, the ability to trust others, and a high level of commitment to the organization (Mohamed et al., 2004). The ability to adapt to a changing environment with ease, is increased with spirituality, since there is a synergy with the elements of trust, responsibility and an understanding of the working elements that can be changed, sustained or improved. According to Campuzano and Seteroff (2009) when an employee comes to a realization that the job is not the end, but a vehicle to express spirituality, employee satisfaction increases since the objective is to give more, and perform at a level of excellence.

# CHAPTER - 3

## LEADERSHIP AND WORKPLACE SPIRITUALITY:

The study of spirituality in relation to leadership is gaining prominence as a topic of research. While the study of leadership has a vast body of empirical and theoretical research, spirituality as related to leadership is still an emergent field of research (Konz & Ryan, 1999). Recently, researchers hypothesized that the roots of effective leadership are grounded in a leader's spirituality (Conger, 1998; Kanungo & Mendonca, 1996; Marcic, 1997; Mitroff & Denton, 1999a). These scholars argue that the roots of effective leadership are grounded in the spiritual dimension or the inner heart and soul of the leader. The role of leadership in promoting spirituality becomes very significant in turning organizations into 'Living Organizations' as termed by Guillory A. William in 'THE LIVING ORGANIZATION, Spirituality in the Workplace', Innovations International, Salt Lake City, UT, 1997.

The top managers and business leaders themselves need to score high in spiritual intelligence to create a spiritual workplace and in turn motivate employees to reap maximum benefit, inner peace and improved productivity in the long run. Further, Fairholm (1998) argues that there is a link between leadership and spirituality, while Vaill (1989) posits that true leadership is in reality spiritual leadership that stems from the heart and incorporates values, beliefs, and a guiding purpose. It is demonstrated that leaders in spiritual organizations score higher in measures of leadership effectiveness than leaders in other settings (Druskat, 1994).

Spiritual leadership differs from traditional leadership which is objectives/outcomes driven by being values driven. Spiritual leadership involves motivating and inspiring workers through an uplifting vision and a culture based in philanthropic values to produce a more motivated, committed and productive workforce. It involves having a clear vision, risk-taking ability, courage, inspiration, trust and persistence. It comprises the values, attitudes, and behaviours essential to fundamentally motivate one-self and others in order to have a sense of spiritual well-being i.e. to experience meaning in their lives, have a sense of making a difference, and feel understood and appreciated. This effects in establishing leader and follower spiritual well-being with

value congruence across the strategic, empowered team, and individual levels to, finally, foster higher levels of employee positive human health, psychological and spiritual well-being, organizational commitment ,productivity and, ultimately organizational performance. In order to incorporate activities which enhance and encourage spirituality at workplace such as Bereavement programs, Employee Assistance Programs, Programs that integrate work/family and Diversity programs that create inclusive cultures etc, the faith and approval of business leaders in this direction becomes utmost important. If the leaders themselves fail to comprehend the necessity of workplace spirituality and its benefits and importance then such programs would be ineffective in producing desired transformation in the workplace.

Studies and researches have revealed that leadership based on vision, altruistic love, hope and faith is assumed to result in an increase in one's sense of spiritual well-being and ultimately positive organizational outcomes such as increased organizational commitment, productivity and continuous improvement and Profits and sales growth.

Fry (2005) extended spiritual leadership theory by exploring the concept of positive human health and well being through recent developments in workplace spirituality, character ethics, positive psychology and spiritual leadership. He then argued that these areas provide a consensus on the values, attitudes, and behaviors necessary for positive human health and wellbeing. Ethical well-being is defined as authentically living one's values, attitudes, and behavior from the inside out in creating a value system congruent with the universal, consensus values inherent in spiritual leadership theory (Cashman, 1998; Covey, 1991; Fry & Whittington, 2005).

Ethical well-being is then seen as necessary but not sufficient for spiritual well-being which, in addition to ethical well-being, incorporates transcendence of self in pursuit of a vision/ purpose/mission in service to key stakeholders to satisfy one's need for calling and membership.

Fry (2005) hypothesized that those practicing spiritual leadership at the personal level will score high on both life satisfaction in terms of joy, peace and serenity and the Ryff and Singer (2001) dimensions of well- being. In other words, they will :

1. Experience greater psychological well-being.
2. Have fewer problems related to physical health in terms of

(cardiovascular disease, cognitive impairment, declines in physical functioning, and mortality). More specifically, those practicing spiritual leadership and their followers would have a higher regard for one's self and one's past life, along with good-quality relationships with others. This in turn helps to create (1) the sense that life is purposeful and meaningful, (2) the capacity to effectively manage one's surrounding world, (3) the ability to follow inner convictions, and (4) a sense of continuing growth and self-realization.

# CHAPTER - 4

# SPIRITUALITY CLIMATE & IT'S IMPACT ON LEARNING

Learning is integral part of human life. Our understanding of learning has moved from behavioral (Skinner, 1950) to cognitive level (in terms of concept formation, abstraction etc.) to the values and beliefs in the form of double loop and treble learning (Argyris, 1978). Hench (1998) has described a new view of management as ``A continuous learning process for creating meaning and value through service with and for others''. In contrast to the model of plan, lead, organize and control, Hench (1998) identified a new model of management which is experiment, serve, self-organize, and learn (Hench, 1998, p. 9).

Accepting spirituality as a dimension of learning has some adult educators suggesting that the spiritual aspect of the learner should also be considered (Dirkx, 1997; English, Fenwick, & Parsons, 2003; English & Gillen, 2000; Tisdell, 2003). However, there has not been much empirical research and the literature base around this topic which is just emerging. In adult education, there are learning formulations, theories, and models that have been around a while and have been verified by some research and the practical experience of adult practitioners.

Even without this empirical evidence, many adult educators argue for honouring the spirituality in adult learning. For example, Tisdell (2003) suggests that spirituality as part of the human experience is important. She examines spirituality, learning, and culture, and she argues that spirituality has an important role in the construction of meaning-making. In another example, English, Fenwick, and Parsons (2003) echo Palmer's (1999) views that spirituality has an integral part in education, and they claim spiritual practices can be fostered in adult education through activities such as purposeful reflection, journal writing,. English, Fenwick and Parsons (2003) believe that spirituality has value for workplace learning in terms of the well-being of workers while bridging the gap between the personal and the professional being. They argue that spirituality as part of adult development learning, supports the need for holistic approaches to learning. This topic has garnered so much interest that *New Directions for Adult and Continuing Education* devoted an entire issue to the topic of spirituality and adult learning in 2000. Within `this issue, some writers suggest there is clearly a spiritual dimension to learning. While English (2000) acknowledges the

complexities of understanding spirituality in adult learning, she argues that there are spiritual aspects to all human beings, but not everyone is aware of this dimension in their lives. In this issue, Vella (2000) is very direct about the relationship of the spiritual as an element of the human dimensions of adult education, and how through attention to these dimensions, effective and excellent adult learning can be facilitated. Vogel (2000) suggests that "Our spirits - our inner lives, our hearts - affect who we are and how we engage others and the world" (p. 17), and she states that it is vital for adult learners to explore connections between integrity and their own spiritual lives. Furthermore, Gillen and English (2000) assert that there is a general consensus about humans as spiritual beings seeking to make meaning out of life, and it is "imperative that adult educators embrace the spiritual and assist learners in making meaning and in answering their deepest questions" (p. 88). Tisdell is one scholar who has written about spirituality in several contexts. She suggests that learners already bring the spiritual into the learning environment, and adults are searching for meaning that brings coherence to their lives, which is connected to our relationships with others and the meaning created by these relationships (Tisdell, 2003). Tisdell is one scholar who has written about spirituality in several contexts. She suggests that learners already bring the spiritual into the learning environment, and adults are searching for meaning that brings coherence to their lives, which is connected to our relationships with others and the meaning created by these relationships (Tisdell, 2003).

Spirituality is also being linked to transformative and holistic learning. Tisdell and Tolliver (2001) make the assumption that transformational experiences are more likely for learners if they are engaged on cognitive, affective, and symbolic or spiritual levels. Furthermore, they argue that transformative learning is "better anchored if we engage on the spiritual level as well, and draw on how people construct knowledge through unconscious processes" (Tisdell & Tolliver, 2001, p. 14). Dirkx (2001b) contends that imagination allows adults to seek a "deep understanding of the emotional, affective, and spiritual dimensions that are often associated with profoundly meaningful experiences in adult learning" (p. 70). He believes that our inner lives and our outer experiences have deep emotional and spiritual connections (Dirkx, 2001b). This concept of learning holistically is another area where spirituality has been a focus of the literature. Understanding the whole learner includes understanding not only the mind-body connection, but also the spirit (English, Fenwick, & Parsons, 2003).

In addition, Groen (2002) studied adult educators in the workplace who were incorporating spirituality. These studies are beginning to offer adult educators some insight into the relationship between spirituality and learning.

Statements about spirituality always being present in learning experiences imply that every learner has a spiritual component. The newest additions to the adult learning landscape are writings on the role of emotions in learning, on the body as a site of learning, and on the relationship between spirituality and adult learning. It is commonly thought that we learn by processing information in the brain. By the time we are adults, learning has come to be understood as a formal and systematic process devoid of any emotional, physical, or spiritual trappings. Scholars writing in this area are attempting to explain and legitimize the role played by emotions, the body, and spiritual dimensions in learning.

Brain research is contributing to the understanding of the importance of emotions in learning (Merriam ,2004) Instinctive behavior,  emotions, and abstract coding of symbols, emanating from different parts of the brain, work together when an adult enters a classroom. Brain research is contributing to the understanding of the importance of emotions in learning. Instinctive behavior, emotions, and abstract coding of symbols, emanating from different parts of the brain, work together when an adult enters a classroom. (p. 66). Second, emotions and feelings connect to the "shared ideas within the world" and are "reflected in big words or concepts, such as Truth, Power, Justice, and Love" (p. 64). We learn to understand or make meaning of our experience through engagement with these emotions and the images they evoke. More than emotions or the body, the topic of spirituality and its connection to learning have attracted a number of writers in recent years. Spirituality is not the same as religion, which refers to an organized community of faith; rather, "spirituality is more about one's personal belief and experience of a higher power or higher purpose" (Tisdell, 2000, p. 309). Spirituality is connected to adult learning through the construct of Meaning Making.

Aktouf (1992) argued that "the human being is, by definition and necessity, a being whose destiny is meaning, intentions, and projects , a subject whose being is meaning and which has need of meaning" (p. 415). We are inveterate meaning makers. Tisdell (1999) made several points about the relationship between spirituality, meaning making, and adult learning.

How spirituality is linked to work and how it manifests itself in the workplace are currently popular topics in the organizational and human resource development literature. As with adult education, the purpose of bringing spirituality into the workplace "is not solely to rediscover God at our jobs but to find fulfilment in one's work" (Fisher & Tompkins, 1999, p.1). Finding fulfilment or meaning and purpose in work involves linking our inner lives to the outer context of the work setting through collaboration, participatory processes, and a sense of community. Spirituality at work is all about creating work environments that are open, friendly, and safe, where people feel connected to others and to their organization.

## Holistic Learning and Spirituality

Holistic learning values the layers of meaning that create the complexities of human beings (Miller, 1999). This concept challenges the scientific world view of a highly rational reality with fragmented building blocks verified by empirical description and precise definitions, and instead, promotes an integrative perspective about ourselves and our relationships to the world (Clark, 1990). According to holistic educator, Ron Miller, human beings are biological and ecological creatures with psychological and emotional dimensions living in ideological, social, and cultural environments (Miller, 1999). In addition, human beings possess a spiritual core (Miller, 1999). There are interactions with all of these different meanings making it impossible to point to any one and say, "This is what is important to being human" (Miller, 1999). Given this supposition, it is also impossible to single out any one of these and say "This is what is important to human learning.

Holistic is based on the Greek word *holos* which means whole or entirely. Holistic learning acknowledges that learners may bring their spirituality to the learning process. English, Fenwick, and Parsons (2003) propose that adult education should reconnect the spirituality and education. They argue that adult educators "can no longer ignore the spiritual basis of our practice. Palmer (1998) examines this notion of wholeness and suggests that there must be a balance between the intellectual, emotional, and spiritual.. According to Lemkow(2005, wholeness values the different dimensions of human experience and recognizes that life, experience, and learning are coextensive. Lemkow (2005) insists that holistic learning emerged as a reaction to reductionism, rationalism, and relativism. Cynicism and shallowness have surfaced out of the belief in a "separative mind" (Lemkow, 2005, p. 21). She argues that learning can not be reduced to biochemistry and while reason is often the mode for discourse

in rationalism, reason alone can not make truth, goodness, beauty, love, and compassion realities in our lives. For example, inspiration for a great work of art is not generated only by reason.

According to Lemkow (2005) intuitive, aesthetic and spiritual faculties are needed for self-transformation. Lemkow (2005) states that "the reasoning mind includes but transcends the physical senses. The intuition includes but transcends the mind. Spirit includes but transcends the intuition" (p. 21). While reason and physical senses are included, these higher faculties transcend them.

Heron's (1992) ideas about wholeness and its relation to spirituality (English, Fenwick, & Parson, 2003; Tisdell, 2003; Yorks & Kasl, 2003). Heron's (1992, 2004) spiritual philosophy is complex and offers a theory about feeling and personhood which includes holistic learning. In this transpersonal theory, the person is fundamentally spiritual. As the person progresses in development, there is an expression of spiritual needs which includes a need for a relationship with the divine. Heron believes in two manifest realms which include the human and physical sciences as well as a subtle realm of "energies, presence, and powers to which extrasensory capacities in humans bear witness." (Heron, 2004, 12 ) Heron (1992) asserts that feeling is the foundation which allows us access to these realms, and feeling, not reason, is the hallmark of personhood. "The notion of a person as a distinct entity capable of continuous development…presupposes feeling as the capacity which makes such growth and learning possible" (Heron, 1992, p. 94). He argues that feeling is a word that explains both the concrete such as sensations of hot and cold as well as subtle sensations of "rapport, grace, and the presence of God" (Heron, 1992, p. 103). His model of the psyche includes four modes of the person. This theory suggests that all four of the modes are functioning at all times and are woven together to create a seamless whole. Heron describes the four modes of the psyche as the (1) affective mode which includes feeling and emotion; (2) imaginal mode which involves intuition and imagery; (3) conceptual mode which comprises reflection and discrimination; and (4) practical mode which contains intention and action. These modes are organized into an up-hierarchy where "each mode emerges out of another below it, so the low modes nourish and support the higher" (Heron, 1992, p. 21).

For some adult educators, Heron's theory about personhood, spirituality, and learning is important since it is inclusive of multiple ways of knowing. Tisdell (2003) uses Heron's

(1992) theory to support her assumption that spirituality is "about constructing knowledge through unconscious and symbolic process" (p. 34).

Heron and Tisdell concur about constructing knowledge through symbolic processes, and both scholars agree that these imaginal or presentational processes include art, music, symbol, ritual, metaphor, image, and intuition.

Heron proposes a theory which relies on a transpersonal model where spirituality is the essence or core of the person. He strongly advocates for holistic learning with the affective and then the imaginable modes forming the foundation for understanding more practical and cognitive aspects in the learning process. Some adult educators resonate with Heron᾿s theory of the person because of his fundamental beliefs that all of life is spiritual and spirituality is inherent in the learning process, and they use this theory to explain the importance of the non rational dimensions of learning when addressing spirituality.

Miller's Transformation Learning Heron (1992) and other advocates of holistic learning contend that learning should be balanced between different types of learning that include the cognitive, affective, and spiritual (English, Fenwick, & Parsons, 2003; Yorks & Kasl, 2003). Miller (1999) is another scholar who is advocating for holistic learning, and the spiritual is clearly a feature in his notion of transformation learning. In building his argument for holistic learning, Miller posits that there are three types of learning. He describes these three types of learning as transmission, transaction, and transformation. Finally, Miller (1999) and Hutchison and Bosacki (2000) associate transformation learning with holistic education. In this world view for transformation, learning is organic; systems are interconnected. Connections are facilitated at every level of learning, and relationships are important. Transformation learning in this viewpoint focuses on a spiritual approach based on the search for meaning. Meaning within this Meaning within this type of learning may be personal, situational, cultural, anthropological, and cosmological. Traditional or transmission approaches to education privilege analytical forms of knowing, but there are a wide variety of forms of "knowing" which can complement analytical aspects of knowledge and meaning (Hutchison & Bosacki, 2000). Reflections about human experiences are important, but reflection in transformation learning is largely non-analytical. Instructional practices allied with transformation learning often include narrative, metaphor, fantasy, or other nonlinear

forms of expression. Within holistic learning, Miller (2005) argues that balance, connection, and inclusion are three essential factors. According to Miller, holistic educators should seek an inclusive framework that allows for a variety of approaches in order to accommodate the diversity of learners. Balance, for Miller, refers to the complementary forces and energies (e. g. rational and intuitive) that need to be acknowledged.

Spiritual is taken to mean pertaining to the soul, or "standing in relationship to another based on matters of the soul" (Oxford English Dictionary, 2002, p. 2963). Soul represents the animating principle of human life in terms of thought and action, specifically focused on its moral aspects, the emotional part of human nature, and higher development of the mental faculties. From the philosophical aspect, it is the vital, sensitive or rational principle in human beings (Oxford English Dictionary, 2002, p., 2928). Knowledge is considered the capacity (potential or actual) to take effective action in varied and uncertain situations (Bennet and Bennet, 2004). Briefly, knowledge encompasses understanding, meaning, and being able to anticipate the future consequences of an action with some level of confidence. In considering the concept of spiritual knowledge, it would be useful to more fully understand the source or spirit of life. Learning is an increase in the capacity for effective action. This definition emphasizes the importance of taking actions and achieving results vice intellectual knowledge without communication or application. Therefore spiritual learning would be defined as the process of elevating the mind as related to intellect and matters of the soul to increase the capacity for effective thought and action.

In development of a model of organization based on the intelligent complex adaptive system analogy (Bennet and Bennet, 2004), forwarded that there are three types of learning. The first, developing skills (type 1 learning), requires learning and practising new ways of doing something. The second (type 2 learning), developing knowledge in a field, requires studying and practising better ways of taking actions, developing new processes, tools and methods, and applying new management ideas (e.g. total quality management, business process reengineering, knowledge management, or even spirituality itself). This is single loop learning (Argyris and Schon, 1978) – learning that occurs when ideas and beliefs are reinforced, or problems are solved by changing actions or strategies for achieving a desired result, while the underlying theories or assumptions about those ideas, beliefs, or actions are not changed.

The third way to learn (type 3 learning) is to change the basic theory and belief about how a system works. This might mean developing new thoughts and ideas that change your beliefs or even your value set; or, in an organization when problems arise and never seem to be solved, changing the underlying theory of how the system works; or, making changes in the system to co-evolve with a changing environment. When any of these occur, an entirely new understanding of the system's structure and what makes it behave the way it does comes into being, and a new frame of reference is developed. This is double-loop learning – learning that occurs when new thought evolves or problems are solved by changing the fundamental values and assumptions of the belief set as well as the strategy and actions driven by that belief set. Double-loop learning is difficult because it requires individuals, groups and organizations to change the understanding of their theory of historical success, what the individual, group or organization must do and how it goes about doing it to achieve its goals. Double-loop learning is learning for the future in that it changes the individual's (or organization's) frame of reference, moving beyond context sensitivity and situation dependence (Bennet and Bennet, 2007) to provide new ways of looking at similar situations.

While certainly behaviour reflecting spiritual thought may be involved in both type 1 and type 2 learning, the domain of spiritual learning would reside largely in type 3 learning – that is, double-loop learning – in that spiritual growth will undoubtedly affect or expand frames of reference more traditionally associated with bureaucratically oriented business and government environments. Spiritual learning would also move beyond double-loop learning to what might be described as type 4 learning, that which has been called intuition, or the "ah ha!" experience, or what could be attributed in spiritual literature to unconscious streaming or channelling. Whatever the source, type 4 learning emerges unconsciously as a form of knowing, with insights often taking the form of transformative knowledge. For example, in times of warfare there are numerous recorded instances where military personnel under fire have known what movements to make without detailed knowledge of the terrain or enemy troop movement.

If "thinking and emotions [are] inseparable from each other and from the social context in which the activity takes place" (Wlodkowski, 1998, p. 68), another way of exploring the concept of spiritual learning is in terms of human capital, social capital and spiritual capital, all of which may contribute to individual – and subsequently organizational – learning (Bennet, A., 2006). Human capital is an individual's knowledge, competency and future

potential, including a unique set of characteristics and values from the past such as expertise, education and experience. Social capital is built from the interactions across human relationship networks (Bennet and Bennet,2004). It is also considered by some economists and sociologists as "the social benefit gained by a society that has low crime, low divorce and illegitimacy rates, low litigation figures, higher literacy, and a high degree of trust" (Zohar and Marshall, 2003, p. 26). Beyond material worth, then, social capital involves a "raised quality of life in a society" (Zohar and Marshall, 2003, p. 26), a wider sense of connectedness and social responsibility. Further, learning is directly connected to an individual's everyday life and the community in which an individual lives, the social context. "To view the learning experience in isolation from everyday experience is to miss some valuable aspects of the learning process. The spiritual dimension is best seen through an understanding of the whole person in a social context" (Wickett, 2000, p. 45).

While spiritual capital could be considered in terms of the amount of spiritual knowledge and expertise available to an individual (Zohar and Marshall, 2003, p. 27), in our model spiritual capital is both an amount (in terms of subject/object feelings and feeling activities) and an internal state-of-being (in terms of a condition, nature or essence), or a quality. Considering capital in terms of stock, spiritual capital would represent an individual's (or organization's, or country's, or world's) investment in the process of spiritual growth. In its entangled learning role with human and social capital, spiritual capital expands the individual's threshold of awareness, the functioning space within which knowledge and events make sense (Bennet and Bennet, 2006).Learning itself can be a state of being, carried over time, that contains, accepts and nurtures a process of becoming that continues throughout a lifetime. In this regard it is similar to spiritual capital: learning capital is the capacity to learn, both the potential and actual ability to implement learning processes and create knowledge. When the process is spiritual learning, the outcome is likely to be, or be associated with, human development, growth and becoming. Human capital, social capital and spiritual capital, then, are entangled forms of learning capital.

Shifting frames of reference are intertwined with learning, thinking and acting (Bennet. D., 2006), and can be the result of type 3 and type 4 learning. There are two categories that shifting frames of references fall into:

(1) Looking from a different perspective (the external approach); and

(2) Taking an empathetic perspective (the internal approach), which moves the viewpoint from the objective to the subjective.

The internal approach is one step beyond a hermeneutic approach (the thing in itself, the observed). It is not merely embedding yourself into the object but becoming part of the object and observing (and feeling) from within the object. Spiritual characteristics introduced above that support shifting frames of reference include: abundance, awareness, caring, compassion, connectedness, empathy and openness. As Senge et al. (2004, p. 10) state:

The key to the deeper levels of learning is that the larger living wholes of which we are an active part are not inherently static. When we become more aware of the dynamic whole, we also become more aware of what is emerging

Teasdale (1999, p. 17-18) explains: Being spiritual suggests a personal commitment to a process of inner development that engages us in our totality. The spiritual person is committed to growth as an essential ongoing life goal. In other words, learning (growth) is a life goal of spirituality. Therefore, it follows that human characteristics that are spiritual in nature would contribute to learning.

Soul is more than a psychological attribute, more than attending to feelings and emotions within the learning setting. It is seeing the world and its suffering through our own experiences of these feelings and emotions (Sordello, 1992). Soul beckons to a relationship between the individual and his or her broader world. Our emotions and feelings are a kind of language for helping us learn about these relationships or transactions. Viewing our experiences through soul draws our attention to the quality or dimensions of experiencing life and ourselves, to matters of depth, values, relatedness, heart. It has to do with authenticity, connectedness between heart and mind, mind and emotion, the dark as well as the light. When we are attending to matters of soul, we are seeking to live deeply, to focus on the concreteness of the here-and-now. This perspective, in the words of Robert Sordello of "facing the world with soul" deepens our understanding of the meaning of learning in adulthood. Learning is not simply a preparation for life. It *is* life, the experience of living. Coming to know ourselves in the world and how we experience and make sense of the other within this world are critical aspects of learning. Learning through soul is about relationship,

our relationships with others and the world, but also with all aspects of our experiences, objective and subjective.

This view locates learning neither as a product of individual will nor of the powerful forces of socio-cultural structures. Rather, learning is understood as a process that takes place within the dynamic and paradoxical relationship of self and other.

Dirkx & Deems, 1996; Ruether, 1995). The "other" is anything, anyone, or any group we perceive as apart or separate from our individual natures. From the perspective of soul, transformative learning results in a transcendence of the limiting, individualistic, and constraining vision provided by the ego. By "descending" deeply into the concreteness and subjectivity of our lives and experiences (Shore, 1996), we paradoxically come to see and understand the self as bound up within its broader relationships with the other. Learning through soul is thus transegoic; it connects us to the immediacy of our present experience and, through this process, leads us into an experience which transcends more limited, ego-based views of the world. We connect in imaginative, vital, and meaningful ways with these broader aspects of our world. Robert Sordello (1992) suggests that learning through soul extends beyond a focus on the individual: his endeavor, Sordello argues, is the primary focus of adult education. Learning through soul is a mystery that "has to do with how something outside of the world rushes in - a sulphurous mixture that ignites the spark of life where there was none before" (Cousineau, 1994, p. xix). Unlike the analytic, reflective, and rational processes of transformation described by Mezirow, learning through soul fosters self-knowledge through symbolic, imagistic, and contemplative means (Moore, 1992). Soul is nourished within our lives through story, song, myth, poetry, and the concreteness of our everyday experiences.

Learning through soul also involves a deep, inter-connectedness of the socio-emotional dimension of learning with the world of ideas and intellectual tasks, a focus on the interface where these two worlds of the learning experience meet, where the inner and outer worlds converge (Cousineau, 1994). To explore an idea means also to give voice to the images which shape its value and meaning for the participants. Learning through soul actively involves the learner in this process of naming and giving voice to these images. It involves forming and working through and in relationship with others. The "other," be it an individual, the group, or the instructor, plays a critical role in stirring the soul to life in adult learning

(Briskin, 1996). The other often becomes the focus of what we believe or feel to be problematic in our lives. At times, they serve as the repository of the rejected parts of ourselves. Learning through soul involves understanding the importance or value of our rejected parts ( Moore, 1992). Nurturing soul also involves attending to the physical aspects of the learning environment. An environment that is cold and sterile, or that is cluttered, messy, and arranged haphazardly can reflect itself in the soul of the group. While a seemingly small thing, attention to the physical aspects of the learning environment reflects the soul's affinity for the particular and the concrete. Caring for the physical space is as important to nurturing soul within a learning group as our physical bodies are to nurturing soul within our individual lives. We nurture soul by giving the ordinary, everyday aspects of these environments depth and value.

Managers in organization need to take into account the larger issues of economics, society and natural environment to conduct the business. That demands the managers to be critically reflective (Burgoyne and Reynolds, 1997). Critical reflection in business organization in new form of industrialization can awaken the organizations to transform the very fundamental way of how business relates to the larger world. Need for transformation in the way of doing business brings the issue of learning core to the matter and perspective transformation is the "central process of adult development" (Mezirow, 1991, p. 155). Transformational learning takes place when we become free of normal constraints, access a higher level of awareness and view the world from more inclusive integral and higher consciousness (in Howard, 2005).

**Spirituality and Transformative Learning**

Overall, there continues to be a lack of research in the area of transformative learning and spirituality, but new ideas about transformation theory have been proposed as the literature in this area has grown. For example, Merriam (2004), in discussing adult development, has argued for the inclusion of affective and intuitive dimensions which are on equal footing with the cognitive and rational dimensions in transformative learning. Scholars have considered ways to expand transformational learning to accommodate ideas of the common good (Daloz, 2000), cultural identity (Tisdell & Tolliver, 2001), social transformation (Dei, 2001; Tisdell & Tolliver, 2003; Schugurensky, 2001), and spirituality (Brooks, 2000; Capeheart-Meninghall, 2005; Dirkx, 2001; Hunter, 1980; McDonald, 1998; Tisdell, 2003; Tisdell & Tolliver, 2001; Vogel, 2003). These authors contend that there are spiritual dimensions in transformative learning.

Mezirow (1991, 2000) is considered the primary architect of transformational learning, although he readily acknowledged Freire's influence on his thinking. Freire emphasized the need for this type of learning to deal with oppression and to bring about social action, but Mezirow focused more on delineating the process of transformation and its relationship to adult development. For Mezirow, the learning that takes place in adulthood is not just added on to what we already know. It is also "the process of using a prior interpretation to construe a new or a revised interpretation of the meaning of one's experience in order to guide future action" (Mezirow, 1996, p. 162). In short, learning is making sense of our experiences, and to make sense of our experiences, we may need to make a change in one of our beliefs or attitudes or in our entire perspective. A change in our entire perspective - the lenses through which we make sense of the world - is key to transformational learning. Both the process and the outcome of transformational learning are developmental.

Dirkx (1997, 2001a) links transformative learning and spirituality in another way by exploring the imaginative and personal ways of knowing in what he calls "soul work" (Dirkx, 1997). He believes that the subject matter can evoke emotional reactions in adult learners, and these reactions may be products of the imagination. Dirkx describes the process of meaning-making as helping learners connect the knowable world to their unconscious. He refers to this process as "soul work". In soul work, the relationship of the learner and the text is used to help identify images and emotional reactions which reside in the unconscious.

Moreover, transformation as a narrative process engages us mentally, emotionally, physically, and spiritually. While weaving these stories, women develop their relational skills and frequently become aware of not just cognition and emotion, but also spirituality (Brooks, 2000).

McDonald (1998) calls for a more holistic understanding of transformational learning. In her study, she did not find that rational discourse and critical reflection held central roles in the transformative process . She identified the recognition of a moral code and a universal force as important factors in the transformational learning process. Vogel (2000) suggests that by inviting learners to reckon with their spiritual lives has potential for transformative learning. Tisdell and Tolliver (2001) are even more direct in their ideas about spirituality and transformative adult education. They make the assumption that "people are more likely to have transformational experiences if they are engaged on three levels of their individual being: the cognitive, the affective, and the symbolic or spiritual" (p. 14). They propose that engaging learners on the spiritual level helps to anchor transformative learning.

Transformative learning was introduced by Mezirow as a rational process for adult learning. Spirituality and transformative learning have been linked by some adult educators, and avenues for convergence in both spirituality and transformative learning literature have included mentoring, narrative discourse, cultural identity, social transformations, and personal transformations related to the everyday life. Dirkx (2001b) asserts that the imaginable mode as described by Heron allows learners to seek a "deep understanding of the emotional, affective, and spiritual dimensions that are often associated with profoundly meaningful experiences in adult learning" (p. 70).

 Mackeracher (2004) reviews much of the literature about spirituality and adult learning and draws on the work of other scholars to define spiritual learning. According to Mackeracher, spiritual learning connects us to a higher consciousness, facilitates transformative learning, connects us to others in meaningful ways, and is associated with a holistic sensation of personal transcendence. She proposes that there are seven conditions associated with spiritual learning, and adult learners are more likely to be involved in spiritual learning if they (1) have a higher state of consciousness, (2) are being open to new experiences and ideas, (3) have an awareness of their own state of consciousness, (4) are able to avoid judging their

experiences or thoughts, (5) reflect on their thoughts and experiences, (6) participate in interactive dialogues to share their experiences, and (7) look for connections in unlikely places.

Heron offers one holistic  theory of learning which proposes that feeling, not reason is the hallmark of the person. His theory integrates multiple ways of knowing and proposes that the affective and then the imaginable modes form the foundation for understanding more practical and cognitive aspects in the learning process. Some adult educators (English, Fenwick, & Parsons, 2003; Tisdell, 2003; Yorks & Kasl, 2003) resonate with Heron's theory of the person because of his fundamental beliefs that all of life is spiritual and spirituality is inherent in the learning process, and they use this theory to explain the importance of the non rational dimensions of learning when addressing spirituality.

Senge (1990) describe learning as metanoia – a fundamental shift in mind in which individuals come to see themselves as capable of creating the world they truly want. It is about taking on an authentic transformational perspective. Systematic examination of the practitioner theorists Peter Senge, Bill Torbert, and Ellen Wingard by Neal et al (1999) points out spiritual themes of transformative learning process in the form of "grace" (Ellen Wingard), "magic" (Peter Senge), and "a miracle" (Bill Torbert).

Metanoia, magic and grace in learning and transformational pursuits brings the learning process close to spirituality which at its root is also a matter of seeing – life seen from a certain perspective (Turner, 1999 in Howard, 2002). Authors (e.g. Jarvis and Walters, 1993, English and Gillen, 2000, Hunt, 2001, Tisdell, 2008) have addressed the adult quest for meaning seriously and have focused on a variety of issues in applying spirituality to practice, in order to enhance the meaning-making capacity. Spirituality and deeper aspects of learning both operate at the level of values and believes. Spiritual growth and learning both are reflected in terms of modifications of values and beliefs. Inclusion or proximity of spiritual aspect in the field of adult learning makes the case of studying both of these aspects together in the organizational context.

Authors like Kahnweiler and Otte (1997) have mentioned about the growing focus on spirituality in the field of HRD. The journal Advances in Human Resource Development brought a special issue which included learning in general and learning in workplace in

particular from different worldviews in the wisdom traditions like Buddhism, Confucian, and Hinduism etc. Role of reflection, higher consciousness, existential values and quest to recognize our place in larger scheme of existence are echoed at various places in the articles in this issue. In the field of workplace learning essential role of community in learning processes is also affirmed and role of spirituality at work is revelled in the phenomenological study of Gallagher, Tonette, and Hilary (2007).

The present study is in some ways an empirical (and quantitative) progression of above mentioned conceptual and qualitative studies and aimed at contributing to the theoretical development in the field of spirituality at workplace in general and spirituality and learning at workplace in particular.

## Teams as Functional Unit of Organizations

Teams are increasingly recognized as building blocks of an organization (Singh and Muncherji, 2007). The utilization of teams at the workplace has increased significantly (Guzzo and Dickson 1996). That has natural result on a concern for enhancing team effectiveness (Hackman 2002).Work teams are increasingly accepted as basic unit of organizations (Cross, Ehrlich, Dawson, and Helferich, 2008). Organizations' reliance on teams to carry out critical strategic and operational tasks is increasing (Edmondson, 1999). As a natural outcome to this trend is that an organization's ability to learn which is defined by Fiol and Lyles (1985) as, to improve its outcomes through better knowledge and insight—is dependent on the ability of its teams to learn (Senge, 1990; Edmondson, 2002). Team is the unit of analysis in this study are defined as work groups that exist within the context of a larger organization and share responsibility for a team product or service (Hackman,1987).

In brief, motivation for the current study comes from the increasing reliance on teams in organizations, its implication on organization learning and increasing recognition of role of spirituality (Mitroff, 1998) at workplace and its connection with learning. In this study learning is tackled in the context of work team and spirituality is conceptualized and empirically analyzed in terms of spiritual climate. Central thesis of this research piece is that spiritual climate results in enhanced learning in teams.

**The Nature of Spiritual Business Organization**

Workplace spirituality asserts that people bring unique and individual spirits to the workplace and are highly motivated by the spiritual need to experience a sense of transcendence and community in their work (Fry and Matherly, 2007). Spiritual organization involves motivating and inspiring workers through a transcendent vision and a culture based in altruistic values to produce a more motivated, committed and productive workforce.

"A spiritual business organization is a concept that is easily misinterpreted and highly misunderstood. The word spirituality or a spiritual business organization has the tendency to attain concepts of the occult or provide a mysterious undertone, but simply put, spirituality is the understanding of meaning and purpose" (Campuzano and Seteroff, 2009, p3).

A Spiritual Business organization is selfless and reflects shared values. The purpose statement of the organization is reflected in the organization's values. This organization should intertwine spirituality and profits (Gull & Doh, 2004). A spiritual business organization is an expression of meaning and a place in which spirituality is expressed (Gull & Doh, 2004) and a spiritual business organization becomes the new competitive advantage in business. A Spiritual Business Organization supports both employees who desire a spiritual work environment and employees who might be indifferent to a Spiritual Business Organization. Employees experience spirituality as a guiding force or a higher power (Mitroff & Denton, 1999). The guiding force or the higher power intertwines with work and influences behavior. According to, Harringtonetal, (2001), the connection is to support behavior with performance.

Spirituality in management literature can be understood in the form of three streams or three aspects; harmony with self, harmony with community and transcendence (Pandey and Gupta, 2008). Description on each of the aspects is followed now:

**Harmony with Self**

Organizations are sites where individuals make meaning for themselves and have their meaning shaped (Dehler and Welsh 1994; Fineman 1993). Dehler and Welsh (1994) proposed that spirituality in organizations represents a specific form of work feeling that energizes action. It is about finding meaning and purpose in work (Ashmos and Duchon 2000; Milliman et al. 2001; Mitroff and Denton 1999; Quatro 2004; Sheep 2004).

**Harmony in Work Environment**

The second dimension of spirituality as literature suggests is relational. This is manifested in relation to the environment in general. This spiritual dimension is manifested in community (Ashmos and Duchon 2000), being comfortable with the world (Morgan 1993), work place integration (2004), connectedness (Ingersoll 2004), compassion (McCormick 1994), respect, humility and courage (Heaton et al. 2004), common purpose (Kinjerski and Skrypnek 2004), and so on, with inclusiveness and interconnectedness (Kinjerski and Skrypnek 2004; Marcqus et al. 2005) amongst its members.

**Transcendence**

The third dimension of spirituality literature is transcendental. Transcendence refers to heightened spiritual states of consciousness (Emmons 2000) and is the result of meditation (Freshman 1999). This is a glimpse of unitary awareness, the state of bliss generally associated with peak experience (Maslow 1971). This is the direct experience of being connected to existence 'unpolluted' by emotions or intellect.

Connection to something greater than oneself (transcendence of self) is a firmly embedded component of spirituality in management literature (Ashforth and Pratt 2003; Dehler and Welsh 1994; Sheep 2004). Ashforth and Pratt (2003) explain that the 'something' can be 'other people, cause, nature, or a belief in a higher power'. McCormick (1994) talks about meditative work and describes it as an experience of being absorbed in work, losing any sense of self and becoming one with the activity.

**Workplace spirituality and organizational culture**

Culture is comprised of visible artifacts such as dress, office layout, ritual, symbols, and ceremonies. At a hidden or more subjective level are expressed values, attitudes, and beliefs that can be discerned from how people justify and explain what they do. It is important for strategic leadership to first embody the core values inherent in a learning organization that has the combined characteristics of the clan and adaptability cultures discussed earlier.

Defining the construct of workplace spirituality is made challenging due to the near infinite ways in which it has been conceptualized. Attempts to reduce this diversity have been made in several thematic reviews of the literature. For example, Coyle (2002) Hicks (2003) identified eight broad themes to workplace spirituality definitions, ranging from those

centered around core moral values to those that produce various states of self consciousness or connection. Giacalone and Jurkiewicz (2003b) offered a ten-dimensional typology of the definitions found within the workplace spirituality literature. Marques et al. (2005) used a quantitative key-wording technique to produce a similar result, and subsequently collapsed the themes into a 116-word definition for spirituality in the workplace; this attempt to be all inclusive failed to be particularly meaningful.

It is perhaps inevitable that the construct of workplace spirituality remains an abstraction because "any one of these terms or clusters of terms is philosophically and theologically complicated and contested" (Hicks, 2003, p. 55). Boje (2000) explained that the different understandings of spirit at work contained in the research to date were produced because the contributors approached the discipline from one of twelve distinct paradigms. Furthermore, the inherent ambiguity in defining the term spirituality is simply compounded when it is manifested in the workplace (Giacalone and Jurkiewicz, 2003b). According to Benefiel (2003a), the discourse of spirituality and the discourse of organizational science simply use a language that is foreign to the other; the latter requires definition and measurement whereas the former sees such techniques as trivializing.

Martin (2002) suggested that cultural artifacts (stories, rituals, and dress, for example),values and assumptions are all different manifestations of culture that can each carry with them deep meanings, depending on an individual's sense making process. Nevertheless, a shared understanding of the organization is needed for cohesiveness and to influence how people collectively enact the reality of the organization (Morgan, 1997). Shared meaning results from rules and symbols that regulate beliefs and through which organizational members coordinate their work efforts (Smircich, 1983). Weick (2001) agreed that it is through symbolic means, in particular, the use of stories, that managers can attempt to symbolically order the practices and thinking of employees by reminding them of key values. Thus, argued Weick (2001, p. 341), "when people share the same stories, those   stories provide guidelines which they can customize diagnoses and solutions to local problems." Schein (1985) defined these as constitutive of the basic assumptions of an organization, to be distinguished from surface level manifestations of a culture, because they operate unconsciously as learned products of group experience.

Mitroff and Denton (1999) went to great lengths to highlight how their spiritual metaphor based on spiritual values was an improvement upon the church metaphor in which religious values are central to the organizational culture. For Hicks (2003), however, efforts to construct spirituality as dichotomous to religion do not hold. Spiritual values do not somehow overcome the plurality (and hence potential divisiveness) of religious values and indeed religious values and practices that create a culture of religiosity may be a fundamental part of one's spiritual expression at work(Hicks, 2003).

**Spirituality Climate of Business Organization**

As mentioned above spirituality in business organization is conceptualized as spiritual climate in the current study. Organizational Climate is a gestalt - 'whole' - that is based on perceived patterns in the specific experiences and behaviors of people in organization. Perception of the work environment refers to organization climate (Rousseau, 1988). This is intervening variable between the context of an organization and the behavior of its members, and attempting to understand how employees experience their organizations (Patterson et al., 2004). These perceptions can be descriptive (Schneider & Reichers, 1983) as well as affective (Patterson, Warr, & West, 2004). These perceptions represent how work environments are cognitively appraised and represented in terms of their meaning to and significance for individual employees in organizations (James & Jones, 1974; James & Sells, 1981 in Patterson et al.).

Schneider (1975, 1990, 2000) suggested for general multidimensional measures of climate and advocated for a facet-specific climate approach where climate is focused on something of interest. Schneider suggests that the dimensions of organizational climate will differ depending on the purpose of the investigation and the criterion of interest. This line of argument facilitates the development of measures of several dimensions of climate such as service (Schneider, 1990), innovation (Anderson & West, 1998; West, 1990) etc.

Spirituality is reflected in the values framework of the organization (Jurkiewicz and Giacalone, 2004) and values are reflected in organizational climate. Hence, concept of work climate was considered to be a promising mechanism for understanding spirituality at workplace (Pandey, Gupta and Arora, 2009). A work climate is defined as perceptions that are psychologically meaningful descriptions that people can agree, characterize a system (Schneider, 1975). Burke & Litwin (1992) suggest that climate is a psychological state - a set

of perceptions that workers have about the local work unit, how it is managed, and how workers relate to each other. The prevailing perception about the work and immediate work group that have spiritual content constitutes the spiritual climate. Broad definition of spirituality is employed in developing the construct of spiritual climate i.e. general and pervasive characteristics of work group and defined as:

**The "collective perception of the employee about the workplace that facilitates harmony with 'self' through meaningful work and meditative work, transcendence from the limited 'self' and operates in harmony with social and natural environment having sense of interconnectedness within it .amongst the members and operates with larger social and natural environment".**

Based on the literature of spirituality in management following variables of spirituality in organization are identified.

- Meaningful work: Meaningfulness refers to work for life not only for livelihood (Ashmos and Duchon, 2000). According to King and Nicol (1999), Jung's theory of Individuation promotes the search for "self," while Jaques' model of Stratified Systems promotes the avenue by which individuals within an organization can search for the inner self and fulfillment. They believed that this combination creates a synergistic relationship where the individual's spiritual quest is realized through the medium of the work place.

- Meditative work: This is deep experiential aspect of spirituality which is deeper than cognition and involves affective, behavioral part of self. Experience of being absorbed in work, losing sense of self, and becoming one with the activity (McCormick,1994).

- Hopefulness: 'Hope' is an element in the emerging theme of 'workplace spirituality' (Fry and Matherly, 2006).) 'Hope' refers to individual determination that" goals can be achieved "and belief that " successful plans can be formulated and pathways can be identified" to attain the goal (Snyder, 2000). In the climate of high hope ,employees are constantly seeking good and multiple routes to desired goals, both as they relate to their work and for life in general and understand that their sense of meaning flows at work (Adam et al. 2003, pp.371).

- Authenticity: "Inner life" is a dimension of spirituality which is the sphere of values and beliefs, emotional maturity, moral development and self-understanding. Authenticity is not just genuineness and openness, though that forms a central part of being authentic, but it is socially situated. It involved helping others, relating to others, and caring for the authenticity of others around us (Avolio et al, 2004). Authenticity is integral to inner life which is nourished through self reflection and meditation (Gardner et.al.2005). This aspect is operationally defined as alignment of people's actions and behaviors with their core, internalized values and beliefs.

- Sense of community: This aspect of spiritual climate is about interconnectedness and interdependence of employees (Jurkiewicz and Giacalone, 2004). This is manifested in relation with social and natural environment. This spiritual dimension is manifested through sense of community (Ashmosh and Duchon, 2000), being comfortable with the world (Morgan, 1993), work place integration, connectedness (Ingersoll, 2003), compassion (McCormick, 1994), respect, humility and courage (Heaton et al., 2004) common purpose, (Kinjerski and Skrypnek, 2004), inclusiveness and interconnectedness (Kinjerski and Skrypnek, 2004; Marcqus et al., 2005).

- Respect for diversity: Indian wisdom tradition has always maintained that the ultimate truth can be explained and attained through different ways (Sinha and Pandey, 2007). Adapting a plural way of accommodating the multiplicities and diversities of societies and individuals and operates on shared opportunity and shared responsibility (Zohar, 2004). Transcendence or *Loksangrah*: This aspect and construct is drawn from traditional Indian literature which is about a concern for larger social and natural environment and defined by Radhakrishnan (2009, pp.141) as working for world maintenance. In the contemporary

Indian public sector firms were used for scale development using exploratory factor analysis. Second phase of study was aimed at validating the scale and to examine the impact of spiritual climate on learning in teams. management literature it is echoed in the terms of transcendence which is related to 'connection to something greater than oneself' (Ashforth and Pratt, 2003; Dehler and Welsh, 1994; Sheep, 2004). Ashforth and Pratt (2003) explain that the ''something'' can be ''other people, cause, nature, or a belief in a higher power.''

The majority of the climate types are aggregation of perceptions of organization (Victor and Cullen, 1988). Like most of the other climate research this is also grounded in the Gestalt psychology of Kurt Lewin. Broad definition of spirituality is employed in developing the construct of spiritual climate that is general and pervasive characteristics of work group and defined as: the collective perception of the employee about the workplace that:

"Facilitates harmony with 'self' and where the members operate with harmony with a sense of transcendence or *loksangrah"*.

Many variables of spiritual climate like meaningfulness (e.g. May et al. 2004,Leiter, 1992), sense of community (e.g. Wenger, 2000,Mintzberg, 2009)and concern for social and natural environment are researched separately. However, contemporary literature on spirituality at workplace considers these constructs in integral manner and accepts these as the reflection of spiritual aspect of work and management. Various wisdoms traditions in the world also enumerate variables like search for meaning and purpose, compassion, concern for larger social and natural environment as spiritual aspects of human life.

**Spirituality Climate and other Related Constructs**

It is important at this juncture to distinguish spirituality climate construct from other constructs like ethical climate, service climate, employee engagement which may sound similar but are not.

Ethical climate may typically refers to code of conduct, inner rules, law etc along with caring independence (Victor & Cullen 1988) whereas spirituality climate construct refers to caring but more from spiritual aspects. Ethical climate considers mainly ethical temperament of the work environment.

Spiritual climate is also conceptually distinct from service climate (Schneider, 1994). Service climate refers to more of managerial and administrative behavioral aspects of organization environment

First, engagement is similar to spiritual climate in that it refers to deeper involvement in work and a feeling of connectedness at workplace. However, engagement and spiritual climate have important differences in terms of level of construct and contributing factors of the

construct. First, employees' engagement (of which Q12 is the most widely used assessment tool) covers both individual level variables like role clarity and learning opportunity. It also covers dyadic). This study was aimed at validating the scale and to examine the impact of spirituality climate on and learning in teams level construct like appreciation and collective level construct, i.e. enabling environment, whereas spiritual climate is purely a collective level construct. Second, sense of contribution to the larger social and natural environment, authenticity, meaningful work are constituting variables of the spiritual climate which are not the part of employees' engagement construct. Spiritual climate is distinct from ethical environment also. Ethical climate typically involves rule, law, and code along with caring and independence (Victor and Cullen, 1988). Similar to spiritual climate ethical climate involves caring but the scope of spiritual climate construct put it close to the spiritual aspects of workplace unlike ethical climate which focuses on ethical temperament of people creating the organizational climate. Spiritual climate is also conceptually distinct from service climate (Schneider, 1994). Service climate captures the managerial behavior and branch administration, whereas, spiritual climate goes beyond the behavior and captures both employees' experience of work and work group and does not include administrative aspects. Spiritual climate construct is also distinct from 'spirituality in management' construct proposed by Ashmos and Duchon(2000). Like spiritual climate construct spirituality in management involves inner life, sense of community, and meaningful work. However, conceptualizing spirituality at workplace as climatic construct and inclusion of Loksangrah, (concern for social and natural environment), authenticity, concern for family extend the scope of the construct from its existing conceptualization proposed by Ashmos and Duchon(2000).

Spiritual climate is collective (macro) level construct. Data from the employees of manufacturing sector were used for exploratory factor analysis. This choice was justified based on the theory which suggests that core spiritual concerns remain same in different walks of life (Maslow, 1996). Data of 162 executives from Indian public sector firms were used for scale development using exploratory factor analysis.(Gupta, Pandey.).

**Learning Organization**

The learning organization is a reflection of the reality of the rapidly changing Internet global environment of the 21st century – a fluid, flexible system almost like a biological entity,

capable of continuous learning and adaptability. A learning organization is one in which expansive patterns of thinking are nurtured and collective aspiration is set free. People in learning organizations are empowered to achieve a clearly articulated organizational vision. They are continually learning to learn together to expand their capacity to create desired results (Senge, 1990). Quality products and services that exceed expectations characterize learning organizations. This new networked or learning organizational paradigm is radically different from what has gone before: It is love-led, customer/client-obsessed, intrinsically motivated, empowered team-based, flat (in structure), flexible (in capabilities), diverse (in personnel make-up) and networked (working with many other organizations in a symbiotic relationship) in alliances with suppliers, customers/clients, and even competitors, innovative, and global (Ancona et al., 1999).

The employees of learning organizations are characterized as being open and generous, capable of thinking in group teams, and risk-takers with the ability to motivate others (Ancona et al., 1999). Furthermore, they must be able to abandon old alliances and establish new ones, view honest mistakes as necessary to learning, and ''celebrate the noble effort'' and exhibit a ''do what it takes'' attitude versus the more traditional ''not my job'' attitude endemic to bureaucracy. Here, people are empowered with committed leaders at the strategic, empowered team, and personal levels that act as coaches in a ''learning organization'' constantly striving to listen, experiment, improve, innovate, and create new leaders (Ancona et al., 1999; Bass, 2000; McGill & Slocum, 1992). For the learning organization, developing, leading, motivating, organizing, and retaining people to be committed to the organization's vision, goals, culture, and values are the major challenge.

**Learning in Teams**

Research in organizational learning and team learning has built up in last two decades, have complemented each other and originated from the same assumption that collectives can be said to learn (Edmondson, 2002). Peter Senge who popularized the idea and process of organization learning is also associated with the early referencing of team learning (Edmondson, at el. 2006).'Team learning' and 'learning in teams' are used interchangeably in the current study and refer to a group process – rather than as a group or team outcome.

**Why Is Team Learning Important?**

According to Peter Senge, team learning is a necessary discipline an organization and its members must develop in order to build an effective learning organization. A learning organization is an organization that encourages and facilitates learning so that it can adapt and transform itself to achieve its goals in an dynamic and competitive world.

An aircraft carrier crew routinely responds to changing situations that require accurate and timely information and communication (Weick & Roberts, 1993). A group of managers must determine how to bridge cultural, geographic and temporal distance to work together to achieve their goals (Gibson & Vermeulen, 2003).. Organizations rely on team learning to solve complex problems, create new knowledge, and to improve the performance of ad-hoc or task specific project teams. Conversely, failures in learning often stifle the ability of organizations to perform (Kayes, 2004).

The literature on team learning emerged as an interdisciplinary effort drawing on knowledge from diverse fields of study including: education (Hertz-Lazarowitz & Miller, 1992) management and organizations (Edmondson, 1999), adult learning (Kasl, Marsick and Dechant, 1997), and psychology (Moreland, 1999; Wegner, 1986). Numerous scholars emphasize team learning as a process (Van De Vegt & Bunderson; 2005; Kasl, Marsick & Dechant, 1997; Edmondson 2003, 1999; Gibson & Vermeulen, 2003). In particular, research has focused on the specific behaviors comprising team learning such as knowledge acquisition and application (Sole & Edmondson, 2003b), experimentation (Gibson & Vermeulen, 2003), and asking questions and seeking feedback (Edmondson, 1999). Research also notes the importance of cognitive aspects of team learning. For example, Edmondson (2003, 2002, 1999) includes reflective thinking in her definitions of team learning. Additionally, Tjosvold, Yu and Hui (2004) focus on reflection of undesired effects as a means to reduce the likelihood of future occurrence. Prior research has also identified several activities such as team leader coaching (Edmonson, 1999), cooperating (Tjosvold, Yu & Hui, 2004), and seeking and providing information (Neufeld & Haggerty, 2001) that are positively related to team learning.

**Definitions of team learning**

Learning at group level is conceptualized as ongoing process of reflection and action characterized by asking questions, seeking feedback, experimenting, reflecting on result, and discussing errors and unexpected outcomes of action (Edmondson, 1999).

The process of team learning involves asking questions, seeking feedback, discussing mistakes, evaluating results and using this information to explore and experiment with new ways of organizing and working on an ongoing basis (www.dattnerconsulting.com )

 **Team learning** is a skill developed for group problem solving and learning. Team learning requires the following components to be effective:( Peter Senge book *The Fifth Discipline: The Art and Practice of the Learning Organization)*

- **Discussion**. Discussion is a process of exploration taken by the team members. Each member presents and defends his view on the issue or problem facing the group.

- **Dialogue**. The next step in team learning is dialogue. Dialogue, in its simplest terms, is  conversation. It's important to emphasis that dialogue in this context is *not* a debate. Team members are not attempting to successfully impose their view on their fellow members when engaging in dialogue. Instead, team members are attempting to go beyond each of their individual understandings of the issue presented and explore the issue creatively from many different points of view in order to make the best decision.

  Team learning focuses on the abilities of a group working together. It involves the interaction of people learning from each other as well as from the task at hand. The learning takes place through the transfer of skills by observing others in action, collective problem-solving  and  experimentation, questioning assumptions and reviewing outcomes as a group.

  (www.london.ac.uk/fileadmin/documents/staff/staff...)

**Individual versus Team Learning**

Team learning can be distinguished from individual learning because team learning occurs when one person is engaged with or coordinating with another person or persons. Unlike individual learning, team learning requires individuals to share experiences with other team members (Kayes, Kayes & Kolb, 2005). Team learning occurs when individuals coordinate knowledge and behaviors in order to reach a team goal. As a social process, team learning differs from individual learning in that it requires interaction and coordination between individuals. Specifically, these individuals are members of groups that 1) work interdependently on a common task or objective, 2) have defined boundaries, and are 3) identified with a team which is also recognized as such by others (Hackman, 1987). Whereas individual learning relies more specifically on cognitive, emotive and behavior of individuals, team learning emerges as cognitions, emotions and behaviors are shared among individuals. Exposure to individuals with different expertise and experience is a vital source of team learning. Interaction with dissimilar others promotes learning by exposing actors to new paradigms and by enabling the cross-fertilization of ideas (Van DerVegt, Bunderson, & Stuart, 2005).

The more these aspects of learning are shared, the more the team, rather than the individual, can be said to be learning (see Edmondson, 1999).

Team learning can be distinguished from individual learning because team learning:

1) involves the interaction amongst team members related to gathering, sharing, processing, and acting on knowledge,

2) requires a level of agreement among team members about acceptable patterns of behavior for knowledge sharing,

3) results in performance improvement (or deterioration) for the team that result from this interaction.

According to Brooks (1994) group processes are of two types of learning behaviors: those that took place within team meetings (e.g., posing problems, sharing and discussing new ideas or information) and those that took place outside team boundaries (e.g., gathering and sharing information outside the team). The current study aimed at contributing to the of field-

based studies which according to Edmondson et al. (2007) are growing in number to examine learning processes in teams, and how they are affected by managerial and contextual factors (such as team climate, goals, and identity) and, in turn, affect team performance. Edmondson, Bohmer & Pisano (2001) identified four steps of the learning process (enrollment, preparation, trials, and reflection) in which each surgical case was a "trial" from which to learn (through collective discussion, or reflection). Gibson and Vermeulen (2003) similarly conceptualized team learning as "a cycle of experimentation, reflective communication, and knowledge codification" (p. 222) in which all three processes must be present, and thus measured team learning as the product of these three factors.

Similar to the work of Edmondson (2002) in the current study, conceptualization of 'learning in teams' has roots in the work of educational philosopher John Dewey, (1938) who described the learning as process of inquiry and reflection. Dewey (1922, in Edmondson, 1999) described learning as an iterative process of designing, carrying out, reflecting upon and modifying action. Teams are social units engaged in collective learning and sites for the cross – fertilization  of ideas and for setting learning norms (Masrick, 1994; Senge, 1990).

This perspective draws attention to team members' informal processes other than their skills and competences linking organizational learning, and the role of  teams. Stated inversely, teams may be frustrated through lack of access to information, adverse group dynamics and by covert political conflicts (Kanter, 1982). Teams are powerful vehicle for reflection, dialogue and the sharing of learning (Senge, 1990). Communication, openness, the support of learning, developing a shared vision, rewarding initiatives, responding to challenge, and recognizing team-work are all aspects of an organization's learning. Similar parameters are advocated by Argyris(1987), Pedler et al. (1991) and Senge (1990).

*In the current study Learning at group level is conceptualized as ongoing process of reflection and action characterized by asking questions, seeking feedback, experimenting, reflecting on result, and discussing errors and unexpected outcomes of action (Edmondson, 1999).*

Level two learning or double and triple loop learning in teams takes place through dialogue, collective reflections positive confrontation and experimentation. Systemic perspective of reality facilitates learning at generative level (Senge, 1990). In their model of "transformative

processes" Yochanan and Paul (1998) proposed an integration of individual, team and organizational learning drawing on systems, strategic, sociological and psychological perspectives. Team learning in their model is explained as sharing and exchange, mutual support along with team projects and products. Watkins and Marsick (2003) also included team learning in their model and questionnaire on dimensions of learning organization and explained this sub construct through collaboration and different modes of thinking. Theoretical basis of his work is systems thinking (Senge, 1990, McGill et al 1992), Conscious efforts to development of latent or intangible efforts (Itam, 1987) Integration of internal knowledge (Leonard-Barton, 1992), Openness and experimentation, Openness to new ideas (Stata, 1989), Absorptive capacity (Cohen and Levinthal, 1990) etc.

Ramnarayan (1996) identified key challenges in building learning capability in Indian managers. He identified blocks of learning (like functional myopia, lack of urge for change etc.) in Indian organization and how to address them in team context (like clear focus on objectives, plans for internal integration, concern for development of capabilities etc.).The factors identified by Ramnarayan (1996) for building learning capabilities for Indian managers are Clear focus on objectives and plans for internal integration, Clear focus on objectives, Attention to integration among departments and functions, Sensitivity to people potential and needs, Concern for long-term planning and success, Support for experimentation and creativity, Environmental scanning and Concern for development of capabilities. There is a significant overlap in the conceptualization of team learning amongst Yochanan and Paul (1998), Edmondson (2002) and Watkins and Marsick (2003) that formed the conceptual basis of the inventory on learning in teams we evolved for the study. Theory-driven (construct-oriented) approach was adopted for scale development of learning in team inventory. Typical process of item generation, face validity check and reliability assessment was adopted for the scale development. .

# RESEARCH METHODOLOGY

# CHAPTER - 5

# THEORY AND HYPOTHESIS DEVELOPMENT

Learning and spirituality both have evolutionary and transformative elements. Transformation in perspective is the central process of adult development (Dirkx, 1998, Mezirow, 1991). As living systems, we humans learn what matters for our growth. On a practical level, the energy for learning can be instrumental, stemming from the desire to do something in the world that matters to us (Shank & Cleave, 1995). 'Search for meaning and purpose', social aspect of learning (Bandura, 1986) and concern for larger positive impact is found to be associated with enhanced learning. We operationalize these notions at group level and hypothesize that:

**Main Hypothesis: Spiritual climate has positive associations with learning in teams.**

**Null Hypothesis: There is no significant positive association between spiritual climate and learning in teams.**

Knowles (1980, p. 43) and Caine & Caine (1997) have also emphasized on role of meaningfulness in the field of learning. Meaningfulness increases procedural justice, decision control, task commitment, and task performance responses .(Hunton and Price, 1997).Team members collectively develop and share the meaningfulness of their tasks. Thus, team members have direct effects on the experiences of meaningfulness of other members. Meaningfulness at team level enhances team and organizational commitment. Finding the work meaningful reduces distractions and enhances the goal directedness (Kirkman and Rosen, 1999). Logically, in group situation when people find the work meaningful they demonstrate more openness towards the whole work context, willingness to engage in collective reflection and experimentation and mutuality.

In the holistic learning theory Yang (2003) recognized learning as a holistic process which includes reflection and emancipation dimensions along with logical and emotional dimensions. In the workplace context interactions among cognition, behavior, feelings, and spirituality affects work relationships and overall experience of work (English et al., 2003;

Tisdell, 2003). Inclusion of spiritual and reflective exercises in curricula (English et al., 2003) and creation of sacred spaces for learning affirms the connection between meditative and reflective aspects of spirituality and learning. Meditative aspect of work corroborates with 25-year research on optimal experience (flow) of Csikszentmihalyi (1990) wherein absorption and merging of awareness with action are common aspects. The theory of flow is inherently related to learning and it is associated with creating engaged learners and optimal learning environment (Shernoff and Csikszentmihalyi. He has identified" total immersion in the activity or joy as characteristics of work (and life) experience' that can liberate human spirit and creativity. This experience creates a positive experience at group and organization level. In a team or group situation meditative experience at work can reduce dysfunctional interactions, openness for collective reflection and collaboration.

'Hope' is an emerging theme of workplace spirituality (Fry and Matherly, 2006). Hope is defined as the process of thinking about one's goals, along with the motivation to move toward those goals and ways to achieve those goals provides an enabling condition for learning from challenges in realizing one's objectives and moving forward (Snyder et al., 1995). Hopefulness is found to be positively associated with communal and shared goals (Snyder and Fieldman, 2000 pp. 390). Learned hopefulness literature suggests the close linkage between hopefulness and learning. It is defined as the process of learning and utilizing problem-solving skills and the achievement of perceived or actual control (Zammerman, 1990) of individual life. Units that have hope in the organization's or teams vision are reported to be putting up extra effort and levels of cooperation necessary to continuously improve productivity and other key performance metrics (Fry, 2003, 2005a; Fry & Slocum, 2008).

Learned hopefulness enables people to develop a sense of psychological empowerment. As individuals gain control and mastery over their lives, and learn and utilize skills for influencing life events they become empowered and to cope with stress and solve problems in their personal lives. (Rappaport, 1981;1985). A sense of empowerment to use different talents and competencies related to reflection, emancipation, logical, emotional and spiritual dimensions and to create the life of one's choice likely to enhance learning at work place. Individual-level empowerment construct of competence, or self-efficacy (Conger &Kanungo, 1988; Thomas &Velthouse, 1990) are operationlized parallel at the team context by (Kirkman

and Rosen, 1999)and showed its positive impact on higher levels of customer service, job satisfaction, and organizational and team commitment.

Aspects of meaningfulness at work, meditative experience at work, hopefulness and a sense of empowerment are conceptualized as components of 'harmony with self' at work in the spiritual climate construct. Above mentioned observations and findings indicate the importance of these subconstructsfor learning in teams. Hence we hypothesize that:

**H1: The spiritual climate signified by 'harmony with self has positive association with Learning in teams.**

Sense of community and authenticity are the component of spiritual climate. Learning as a process also carries social and community dimension (Bandura, 1986). In the social learning theory proposed by Bandura (1996, 1986) reciprocal determinism is mentioned as one of the components of learning. This refers to a process in which a learner's behavior, cognition, and other personal factors interact with environmental influences. Yang (2004) suggests "learning is not only an individual activity but also a social event" (p. 245). As Yang states, the social group or organization learns, thereby changing the group's collective beliefs, social norms, and values. Indian traditional wisdom conveys many tenets conveying the importance of a sense of community and openness for learning[1].

Essential role of community in learning processes is affirmed and role of spirituality at work is reveled in the phenomenological study of Gallagher, Tonette, and Hilary (2007). Learners must interact with a social group or organization within specific contexts for the benefit of the organization. Yrjö; Engeström and Merja (1995) explained the connection between collaborative problem solving and learning in team climate. Edmondson (1999) proposed the idea and importance of Psychological safety in team context for learning. Psychological safety is defined as shared belief that the team is safe for interpersonal risk taking, that supports the sense of community in a team and its members to be authentic and can create an ambience for collective reflection and experimentation within teams.

Authenticity is proposed to be a group level construct based on the argument of Barab, Squire and Dueber (2000) that authenticity occurs 'not in the learner, the task, or the environment,

but in the dynamic interactions among these various components'. Authenticity, a sense of community and respect for diversity are conceptually clubbed as 'harmony in work environment' within the construct of spiritual climate. In view of these finding it makes worthwhile to investigate the plausible positive relationship between learning in teams and a harmony in team environment. Hence we hypothesize:

**H2: The spiritual climate signified by Harmony in team environment is positively associated with learning in teams.**

Transcendence or *Loksangrah* is the third dimension of spiritual climate. Conceptualization of this aspect of spiritual climate corroborate to the work of Ashforth and Pratt (2003) who defined transcendence as 'connection to something greater than oneself'. They explained that the ''something'' can be ''other people, cause, nature, or a belief in a higher power.'' Connection to something greater is reflection of human property of altruism. Altruism may not be in reciprocation or utilitarian gains and is one of the features distinguishing human being from other species (Fehr and Fischbacher, 2003). Human altruism though affected by but extends far beyond reciprocal altruism and reputation-based cooperation and transcends natural bondage of genetically related kins. It is significantly shaped by nature of the evolutionary forces (Fehr and Fischbacher, 2003). In light of these finding the recent evidences are not surprising that many employees draw the purpose of their work in terms of having a positive impact on the beneficiaries of their efforts (Colby, Sippola, & Phelps, 2002; Ruiz-Quintanilla & England, 1996). In Indian traditional wisdom the ideal action is termed as *loksangrah* and translated as 'that which is performed for the world maintenance and not due to personal attachment' in the third chapter of Bhagwad Gita[2].

Spirituality is about enhancement of frame of reference, identity and ego self (Maslow, 1971, 1980 in Chandler, Holden and Kolander, 1992, Opatz, 1986). With expansion of frame of reference come new thoughts and ideas that change beliefs or even value set which is described as double loop learning as defined by Argyris and Schon (1978). Further to this Bateson (1972) also described learning at level three as profound re-organisation of character. Learning at level three, he believes, is something of the sort that occurs from time to time in psychotherapy, religious conversions, and in other sequences in which there is.

Ruiz-Quintanilla & England (1996) provide empirical support for the dimensions underlying the way in which people define working. It ranges from burden/control to social contribution. Individuals who define working largely in terms of 'responsibility' and 'exchange' emphasize reciprocal exchange relations between the individual and the organization/society. Individuals who define working largely in social contribution terms emphasize the social benefits of working. These dimensions are built based on the finding of England and Harpaz (1990) about broad rationale, personal outcome and control over the context of work. We club first two elements, broad rationale and personal outcome and call it 'action logic'. Action logic represent the fundamental connection and motivation with work. It also captures the different frames of reference through which work is viewed. Double loop learning takes place when action logic transcends from personal needs to contribution to the larger society. Opportunity and willingness to make contribution to something 'larger than self' and positive accomplishment at work contribute to positive energy and motivation to learn. Triple loop learning manifests itself in the form of ``collective mindfulness''. It takes place when we become free of normal constraints, access a higher level of awareness and view the world from the more inclusive integral and higher consciousness (in Howard, 2005). Duchon and Plowman, (2005) have reported that connects of employees to the larger good enhances their satisfaction and performance. Researchers have often assumed that pro-social motivation directly increases task effort, persistence, and helping and citizenship behaviors (e.g., Grant, 2007; Rioux & Penner, 2001). Grant and Berry (2010) proposed that pro-social motivation moderates the effect of intrinsic motivation and openness to different perspectives which cultivates a desire to explore and learn.

**H3: Spiritual climate signified by Transcendence or Loksangrah aspect of (concern for larger social and natural environment) is positively associated with learning in teams.**

# CHAPTER 6

## RESEARCH DESIGN AND STUDY FINDINGS

**Scope of study**

The present investigation was carried out to establish association of spiritual climate with team learning. The focus of the study is on business teams in business units irrespective of size, sector, location or any other possible variables with regards to business organization. Therefore, sampling unit in this study is a team and specifies the size & characteristics of team instead of organization. The study hypothesized that spiritual climate of the team have impact on team learning.

Pandy (2009) has developed and validated the inventory to assess spiritual climate of the business teams. The inventory can be adopted for the present study as the study is planned in the same cultural setting. However, the study proposed revalidation of the inventory to check its suitability for population under study. The study also proposed development and validation of construct for learning in teams. The relationship between spiritual climate and team learning behavior will be explored in the present study using statistical analysis tools.

**Objectives of research:**

**Primary Objective:**

- The objective is to study the impact of spiritual climate on team learning.

**Secondary objectives:**

- To revalidate construct used to measure spirituality climate.
- To design and validate construct for learning in teams.

**RESEARCH METHODS**

This study is based on the positivist paradigm of social science. Deductive procedure of falsifying hypotheses is adopted as cognition process. Two constructs between which a positive relationship is proposed are assumed to be constituted of several sub-constructs or variables. The research  design involved the validation of spiritual climate scale, development of  scale  for learning in team and to examine the association of these  two construct at sub variable level. Both the constructs being of macro-level the unit of observation was the work group i.e. teams

**Study setting**

The study was conducted in Pune city, India in 2011-2012. Nearly fifty years since the first few large manufacturing units set up  their base in and around Pune,. the city has grown into one of three major industrial hubs in the country. While its proximity to commercial capital Mumbai has certainly played a role in it achieving this status, and factors like availability of trained manpower and salubrious climate have added favourable weight, of equal value is the fact that both industrial infrastructure and real estate development have also kept pace.Pune has surpassed Bangalore as a hub for high-end engineering design and product development work done out of MNC firms' R&D outposts

**Study design**

Questionnaire-based cross-sectional survey design was used which according to Rubin & Babbie, (2005) suits the aim of describing and measuring a larger population.

**Sampling Method**

Cluster sampling method was used in the research. Cluster sampling involves grouping the population and then selecting the groups or the clusters rather than individual elements for inclusion in the sample. In the present study commercial organization was unit of randomization.

In the present study two inventories were used having 20 items & 21 items respectively. With reference to recommendations by Cattell (1978),Gorsuch ,(1983),david Garson,(2008 ) for performing factor analysis, N:P ratio should be in the range of 3:1 to 6:1. Considering this the

sample size required for the present study was maximum 126.However in the present study total of 169 participants were involved, and N:P ratio is 8:1.

## Sample selection

Mahratta Chamber Of Commerce Industries & Agriculture (MCCIA) has been playing a significant role in accelerating the industrial and economic development of Pune region for more than seven decades now. It is one of the most active chambers of Commerce in India and has been instrumental in promoting number of institutions in Pune. MCCIA has continuously driven to make Pune a global business destination and has been catalyst for economic development of the region.

The authorities of MCCIA, were contacted and a list of organizations registered with them was procured. This list was treated as a sampling frame form which 50 organizations were selected randomly using computerized random number tables and they were invited to participate in the study. Nearly 27 organizations were ready to participate in the study however; actual data collection was possible only with 17 organizations due to availability of the team members at the time of visit. The teams were included from these 17 organizations using following criteria:

## Inclusion criteria for teams

- Team should have minimum four members
- the team should be operational for minimum three months at the time of data collection
- at least more than four fifth members should take the inventory for the team In line of the procedure followed by Ashmos and Duchon (2004)
- No difficulty in understanding the English language
- The respondents should be employed full-time in their work organizations.

Data collected from 34 teams of these 17 business organization comprising of manufacturing, banking, restaurants, insurance services (of size ranging from less than 100 to over 10,000 employees) were finally analyzed for the present study. The teams were into function of production, marketing and HRM operations. ( Production-6 , sales-4 ,HR- 2,A/C-1,Service-8, ,system eng -2, Project -9,B.D-2)

**Survey instruments-**

**Spiritual Climate Inventory**

Spiritual climate inventory developed by Pandey, Gupta and Arora (2009) was used for this study. Variables covered in this inventory represents three conceptually converging streams being identified in the contemporary literature 'spirituality in management' (Pandey and Gupta, 2008) and their parallel notions in the Vedantic literature. The variables of meaningful work, meditative work, hopefulness, and a sense of empowerment are related to harmony with self. Sense of community, authenticity and respect for diversity are related to harmony in work environment and Loksangrah (concern for social and natural environment) are related to transcendence aspect of workplace spirituality. Thus the inventory measured three dimensions of spiritual climate, namely;

a) Harmony with self (Meaningfulness, Meditative work, Hopefulness, Empowerment)

b) Harmony with environment (sense of community, Authenticity),

c) Transcendence (Concern for community, natural environment)

Items in the inventory are like; "work itself is an enjoyment for me", "People feel that they are master of their destiny", "People here work as if their work contributes to community" etc. the complete inventory consisted of 20 such items. The responses for these items were recorded using a five-point Likert format ranging from 1(strongly disagree) to 5 (strongly agree).

As per the construct developed and validated by by Pandey et.al (2009), the factor analysis of the data provided eight factor solution for spiritual climate at workplace. These factors were related to meaningful work, sense of community, loksangrah and meditative work.

KMO and Bartlett test value was 0.775 and Cronbach's alfa was 0.873. Value of Chi square test (371.988) at 231 degrees of freedom was significant at less than 0.01 level of significance The instrument was explaining approximately 72% variance in the given sample. Value of Cronbach's alfa for the different sub-constructs was between 0.91 and 0.74 indicating the reliability of the scale (Pandey, Gupta and Arora, 2009). In the present study the spiritual climate inventory was revalidated using the data collected on the study population.

**Team Learning**

Team learning behavior scale was developed primarily based on the work of Edmondson(1999) and Ramnarayan (1996). Edmundson (1999) conceptualized learning at group level of analysis as an ongoing process of reflection and action, characterized by asking question, seeking feedback, experimenting, reflecting on results etc. Ramnarayan (1996) identified blocks to learning in Indian organizations and remedy for addressing them like clear focus on objectives, attention to integration, sensitivity to people potential and needs, support for experimentation, environmental scanning etc. Items in the team learning inventory were like;  "My team functions in an integrated way", "My team works with clear focus on objectives", "Team members rely and bank upon each other competencies and expertise" etc. The final questionnaire had 21 items which measured two dimensions namely; i) Mutuality and ii) Collective reflection & experimentation. The responses were recorded using five points Likert type format. Pilot testing of the instrument was done with two teams at one of the leadership Institute located in Pune. However, pilot testing did not suggest any modification in the questionnaire. The questionnaire was administered to 34 selected teams. The data collected were further subjected to statistical procedures to test reliability of the scale.

**Data collection**

Data collection: Prior permission of authorities of the organizations was taken to conduct the study in their organizations. The the purpose and importance of the research of the study was explained to the participants.  An appeal was made to seek cooperation of the participants and they were requested to provide complete and true information for the success of the study. The researcher guaranteed the confidentiality of the data to all the participants.

Self administer questionnaire was used to collect data. The researcher instructed the participants about the instrument and the method of recording their responses .The participants were given sufficient time to complete the questionnaire .The questionnaires were checked for completeness after  filling,

**Data aggregation and analysis**

As we have theorized spiritual climate and learning in teams; both are group level phenomenon and proposed hypotheses targeted at the group level of analysis, consistent with other research in climate based on aggregation of perception of team members. (e.g. Schneider, 1994, Edmondson, 2002). In the present study, we utilized intra class correlations (ICCs: Bliese, 2000) which is commonly used test to justify aggregation to test the within-

group similarity. The ICC(2) values provide an estimate of the reliability of the group means and is typically estimated with the use of mean squares from a one-way random-effects ANOVA (Kozlowski & Klein, 2000), ranged from 0.34 to .89 for different teams.

**Adequacy of Measures**

Based on the preparatory analyses to assess psychometric properties of the instruments, including consistency reliability and discriminant validity of the scales supported the usages of the same for hypothesis testing. The results supported the adequacy of all the measures for substantive analysis. For both multiple item sub-scales used in the study, the reliability levels were 0.82 to 0.95. Discriminant validity was established through factor analysis. As the team antecedent and outcome sections yielded distinct factors with Eigen values greater than one. These results demonstrated that the team survey was not hampered by excessive common method variance.

Cross sectional survey design was used for the falsification of hypothesized relationship between spiritual climate and learning in teams. Testing the adequacy of the relationship element of proposition was based on two major criteria; logical adequacy and empirical adequacy. Logical adequacy is defined as the implicit or explicit logic embedded in the hypotheses and propositions which ensure that the hypotheses and propositions are capable of being disconfirmed (Bacharach, 1989). To ensure the logical adequacy of the proposed relationship, nature of antecedents and consequents are specified. Respondents of antecedent (spirituality in organization) consequent variable (learning in teams) are the members of same team. In order to check the strength of causality regression analysis was performed on these scores.

The study assumed that the spiritual climate in which the employees are working is more likely to facilitate team learning. Hence, we proposed the following relationships between team learning and the components of spiritual climate of the organization. Hypothesis 1 predicted that harmony with 'self' in team climate would be positively related to learning in team whereas Hypothesis 2 suggested that harmony in work environment would be positively related to learning in team. Hypothesis 3 suggested that transcendence or loksangrah would be positively related to learning in team.

**Statistical Analysis**

Statistical analysis was done using the software SPSS 16.0 for Windows (SPSS, Chicago, IL, USA). Data was subjected to statistical analysis such as mean, standard deviation, Karl Pearson's correlation coefficient (*r*), bivariate regression, factor analysis and reliability testing analyses.  Details of the same are given below :-

**Descriptive statistics**: Scores of the spiritual climate and team learning obtained from 34 teams are summarized using Mean and Standard deviation (SD) of mean. Mean is a measure of location which is calculated by adding values of all the observation in a variable and divided by number of observations. SD is the most frequently used measure of deviation. It is defined as the mean of the squared deviation from the arithmetic mean.

**Correlation**: The correlation coefficient (r) is a measure of the degree of linear relationship between two variables. The correlation coefficient r tends to lie between -1 to +1. If r is near +1, it indicates a strong positive association between x and y i.e. when one increases the other variable also increases. A value near -1 indicates a strong negative association i.e. when one variable increases other decreases. If r=0 indicates there is no correlation between x and y. Correlation analysis was performed to assess the association between various components assessed in both the spiritual climate inventory as well as in the learning team scale.

**Regression**: Regression emphasizes on predicting one variable from the other. In regression the interest is directional, one variable is predicted and the other is the predictor. It is customary to denote the independent variable by x and the dependent variable by y. Regression equation is

$$y = a + bx$$

where, x and y are the variables. b = The slope of the regression line or regression coefficient of x upon y. a = The intercept point of the regression line and the y axis. Regression analysis was performed to assess the causal relationship of spiritual climate with team learning.

**Factor analysis:** Factor analysis was used to determine the construct validity of the scale. The earlier analysis used Principal Axis Factoring method using Oblimin with Kaiser Normalization rotation was used to identify an empirically derived set of subscales (Pandey 2009). Factor loadings ≥ 0.60 were considered significant and were used to define factors. An iterative process of factor and item analyses was used to compare various forced factor solutions to determine the smallest number of factors that were psychologically coherent and

meaningful. The identified factors should have the smallest number of items with a coefficient $\geq 0.70$.

Factor analysis is designed for interval data, although it can also be used for ordinal data collected through Likert scale. The variables used in factor analysis should be linearly related to each other. The linear association between the variables can be checked by studying at scatter plots of pairs of variables. The factor analysis model can be written algebraically as follows. If you have p variables X1, X2, . . . ,Xp measured on a sample of n subjects, then variable i can be written as a linear combination of m factors F1, F2, . . . , Fm where, as explained above m < p. Thus,

$$Xi = ai1F1 + ai2F2 + \ldots + aimFm + ei$$

where the ai are the factor loadings (or scores) for variable i and ei is the part of variable Xi that cannot be 'explained' by the factors.

There are three main steps in a factor analysis:

1. Calculate initial factor loading using Principal Component method- As the name suggests, this method uses the method used to carry out a principal components analysis. However, the factors obtained will not actually be the principal components (although the loadings for the $k^{th}$ factor will be proportional to the coefficients of the $k^{th}$ principal component).

2. Factor rotation: Once the initial factor loadings have been calculated, the factors are rotated. This is done to find factors that are easier to interpret. If there are 'clusters' (groups) of variables — i.e. subgroups of variables that are strongly inter-related — then the rotation is done to try to make variables within a subgroup score as highly (positively or negatively) as possible on one particular factor while, at the same time, ensuring that the loadings for these variables on the remaining factors are as low as possible. In other words, the object of the rotation is to try to ensure that all variables have high loadings only on one factor.

3. Calculation of factor scores: When calculating the final factor scores (the values of the m factors, F1, F2, . . . , Fm, for each observation), a decision needs to be made as to how many factors to include. This was done by choosing Eigen values over one which is commonly used approach. The final factor scores are usually calculated using a regression-based approach.

**Cronbach's alpha:** It is a coefficient of <u>internal consistency</u>. It is commonly used as an estimate of the <u>reliability</u> of a <u>psychometric test</u> for a sample of examinees. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale.

**Findings of the study**

The study analysed data collected on 169 respondents from 34 teams. Of the respondents, 11 % had the lowest education level of a diploma (typically three years of education beyond high school or matriculation) and 71 % had education levels of a bachelor's degree and 18 % had master degree or above. Seventy-eight percent were males.

**Table-1A: -  Demographic  profile  of Respondents**

| Sr. No | Characteristics | % value |
|--------|-----------------|---------|
| 1 | **Gender**<br>Malle<br>Female | <br>78 %<br>22 % |
| 2 | **Age**<br>20 -30<br>31 -40<br>41 -50 | <br>38.46 %<br>44.97 %<br>16.56 % |
| 3 | **Education**<br>Diploma level<br>Graduation<br>Post Graduation & above | <br>11 %<br>71 %<br>18 % |
| 4 | **Occupation**<br>**Service** | <br>100 % |

The findings of the study are presented in three sub-sections; firstly, the data pertaining revalidation of spiritual climate inventory is given. Second section covers validation of team learning scale. Third section describes spiritual climate and team learning behavior of the sample teams and it also establishes the relation between spiritual climate and team learning.

*Revalidation of Spiritual climate scale:*

To check the validity of the factor structure proposed in the spiritual climate related article of Pandey, Gupta and Arora (2009). The factor analysis was performed using data collected in the present study. In order to revalidate the factor structure of spiritual climate, Principle Axis Factoring was performed. This method is recommended to be done after Principle Component analysis which is more suitable for exploratory stage. Spiritual climate inventory showed eight factors solution as presented in Table 1. These factor explained about 64.3% variance. Reliability coefficient (Chronbach Alfa) of the scale was 0.850.

**Table 1B : Eight Factors of Spiritual Climate Inventory.**

| | Structure Matrix Factor | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| SpiCli_Mean1_1 | 0.225 | 0.31 | 0.866 | -0.106 | 0.089 | 0.205 | -0.081 | -0.007 |
| SpiCli_Mean2_2 | 0.25 | 0.23 | 0.839 | -0.124 | 0.049 | 0.34 | -0.29 | -0.083 |
| SpiCli_Mean3_3 | 0.184 | 0.219 | 0.825 | 0.031 | 0.069 | 0.343 | -0.263 | -0.17 |
| SpiCli_Med1_4 | 0.399 | 0.097 | 0.637 | -0.431 | 0.253 | 0.228 | -0.291 | 0.031 |
| SpiCli_Med2_5 | 0.137 | 0.185 | 0.593 | -0.384 | -0.004 | 0.364 | -0.457 | 0.254 |
| SpiCli_Med3_6 | -0.03 | -0.031 | -0.11 | 0.816 | 0.02 | -0.116 | -0.139 | 0.011 |
| SpiCli_Emp1_7 | 0.021 | 0.114 | 0.301 | 0.167 | 0.325 | 0.26 | -0.758 | -0.117 |
| SpiCli_Emp2_8 | 0.308 | 0.162 | 0.37 | -0.288 | 0.09 | 0.831 | -0.221 | 0.058 |
| SpiCli_Emp3_9 | 0.347 | 0.229 | 0.317 | -0.22 | 0.138 | 0.872 | -0.281 | -0.08 |
| SpiCli_Hop1_10 | 0.224 | -0.003 | 0.254 | -0.135 | 0.357 | 0.614 | -0.343 | -0.335 |
| SpiCli_Hop2_11 | 0.032 | 0 | -0.102 | 0.731 | -0.004 | -0.365 | 0.029 | -0.011 |
| SpiCli_Comu1_12a | 0.228 | 0.419 | -0.16 | -0.026 | 0.638 | 0.164 | -0.328 | 0.261 |
| SpiCli_Comu2_12b | 0.235 | 0.505 | 0.048 | -0.134 | 0.644 | 0.034 | -0.225 | -0.124 |
| SpiCli_Comu3_12c | 0.017 | 0.268 | 0.061 | -0.036 | 0.847 | 0.187 | -0.222 | -0.007 |
| SpiCli_Comu4_12d | 0.177 | 0.347 | 0.17 | -0.007 | 0.825 | 0.067 | -0.042 | -0.288 |
| SpiCli_Auth1_13 | 0.58 | 0.3 | 0.406 | -0.21 | 0.066 | 0.438 | -0.499 | -0.263 |
| SpiCli_Auth2_14 | 0.424 | 0.206 | 0.099 | 0.028 | 0.055 | 0.22 | -0.772 | -0.294 |
| SpiCli_Auth3_15 | -0.436 | 0.086 | -0.057 | 0.712 | -0.159 | -0.122 | 0.075 | 0.085 |
| SpiCli__Comu5_16 | 0.255 | 0.044 | 0.132 | -0.262 | 0.095 | 0.628 | -0.276 | -0.549 |
| SpiCli_fami1_17 | 0.34 | 0.223 | 0.196 | -0.089 | 0.322 | 0.164 | -0.424 | -0.737 |
| SpiCli_Lok1_18a | 0.176 | 0.855 | 0.219 | 0.079 | 0.268 | 0.195 | -0.225 | 0.067 |
| SpiCli_Lok2_18b | 0.245 | 0.9 | 0.242 | -0.076 | 0.375 | 0.065 | -0.2 | 0.011 |
| SpiCli_Lok3_18c | 0.219 | 0.867 | 0.236 | -0.047 | 0.296 | 0.126 | -0.075 | -0.136 |
| SpiCli_Lok4_19 | 0.827 | 0.296 | 0.254 | -0.07 | 0.1 | 0.256 | -0.173 | -0.123 |
| SpiCli_Lok5_20 | 0.827 | 0.149 | 0.26 | -0.12 | 0.126 | 0.353 | -0.305 | -0.191 |
| Extraction Method: Principal Axis Factoring. | | | | | | | | |
| Rotation Method: Oblimin with Kaiser Normalization. | | | | | | | | |

Data adequacy for the spiritual climate inventory was checked with the KMO test, the value of which is 0.831 (Table 2). A value is higher than 0.5 which indicated that the data is sufficient for factor analysis. Chi square value 1603.94 at 300 degrees of freedom was significant at less than 0.0001 level of significance. The significant value of Chi Square test

indicates the acceptability of eight factor solution. The eight factor solution proposed by them holds valid on the current sample.

**Table 2: KMO and Bartlett test statistics for spiritual climate scale**

**KMO and Bartlett's Test**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .831 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1661.616 |
| | Df | 300 |
| | Sig. | .000 |

As explained in Pandey, Gupta and Arora (2009), these eight sub-construct of the scale represents three dimensions of spiritual climate. Using the data of the present study, internal consistency of these three sub-scales were assessed. High values for Cronbach's alpha obtained during analysis indicated good internal consistency of the items in the scale (Table 3).

**Table 3: Cronbach's alpha for main domains of study**

| S.N | Scales | Cronbach's alpha |
|---|---|---|
| 1 | Harmony with self | 0.727 |
| 2 | Harmony with environment | 0.632 |
| 3 | Transcendence | 0.776 |

*Reliability of Team Learning behavior scale:*

Principal Component Analysis was performed in order to validate the factor structure of team learning behavior scale. The components were rotated by Varimax with Kaiser Normalization to achieve a simpler structure with greater interpretability. The factor score coefficients were estimated by the regression method, which produces uncorrelated scores with a mean of zero and a standard deviation of 1. Learning in Team construct which is measured through 21 item inventory showed two factor solution (Table 4) i.e. two factors had Eigen value greater than one.

**Table 4: Learning In Team: Factor Structure**

| | Structure Matrix Factor | |
| --- | --- | --- |
| | 1 | 2 |
| LiT_IMut | 0.488 | 0.443 |
| LiT 2Mut | 0.645 | 0.299 |
| LiT 3 Col Ref Exp | 0.376 | 0.485 |
| LiT 4 Col Ref Exp | 0.376 | 0.627 |
| LiT 5 Col Ref Exp | 0.199 | 0.61 |
| LiT 6Col Ref Exp | 0.292 | 0.592 |
| LiT 7 Col Ref Exp | 0.148 | 0.775 |
| LiT 8 Col Ref Exp | 0.376 | 0.502 |
| LiT 9 Col Ref Exp | 0.172 | 0.767 |
| LiT 10 Col Ref Exp | 0.336 | 0.655 |
| LiT 11 Mut | 0.404 | 0.58 |
| LiT 12 Mut | 0.653 | 0.401 |
| LiT 13 Mut | 0.595 | 0.362 |
| LiT 14 Mut | 0.68 | 0.302 |
| LiT 15 Mut | 0.769 | 0.192 |
| LiT 16 Mut | 0.812 | 0.222 |
| LiT 17 Mut | 0.796 | 0.208 |
| LiT 18 Mut | 0.659 | 0.283 |
| LiT 19 Mut | 0.627 | 0.435 |
| LiT 20 Mut | 0.614 | 0.487 |
| LiT 21 col Ref, Exp | 0.379 | 0.428 |

KMO and Bartlett test value was 0.899. Value of Chi square test was 1607.780 at 171 degrees of freedom and it was significant at less than 0.01 level (Table 5). The instrument explained 67.70 % variance. As Chi Square value which is the test of Goodness of Fit was found to be significant hence we can accept the two factor structure of Learning in Teams. Reliability coefficient (Chronbach Alfa) of the mutuality scale and Collective reflection & experimentation scale 0.920 and 0.859, respectively (Table 6). Chronbach Alfa of completer team learning scale was 0.935. Thus high reliability coefficient supported the use of scale for further analysis.

**Table 5: KMO and Bartlett test statistics for team learning scale**

**KMO and Bartlett's Test**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .899 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1607.516 |
| | Df | 171 |
| | Sig. | .006 |

**Table 6: Cronbach's alpha for main domains of study**

| S.N | Scales | Cronbach's alpha |
|---|---|---|
| 1 | Mutuality | **0.920** |
| 2 | Collective reflection & experimentation | **0.859** |
| 3 | Team learning | **0.935** |

*Relation between spiritual climate and team learning:*

Table 7 describes team scores for learning in team and the components of spiritual climate scale. The mean (SD) score for learning in teams was 3.37 (0.38) while majority of the teams has fallen in the middle category of 3.1 to 4. Similarly, mean (SD) scores for harmony within self was 3.43 (0.31), for harmony within environment was 3.47 (0.40) and for transcendence was 3.66 (0.46).

**Table 7: Descriptive statistics of main variables of the study**

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Harmony with self | 34 | 2.83 | 4.21 | 3.4303 | .31285 |
| Harmony within Environment | 34 | 2.60 | 4.26 | 3.4706 | .40205 |
| Transcendence | 34 | 2.89 | 4.50 | 3.6612 | .46805 |
| Team learning | 34 | 2.87 | 4.39 | 3.6703 | .37771 |
| Valid N (listwise) | 34 | | | | |

| Frequency distribution | | | | |
|---|---|---|---|---|
| Team scores | Harmony with self | Harmony within Environment | Transcendence | Team learning |
| 2 to 3 | 2 (5.9 %) | 4 (11.8 %) | 4 (11.8 %) | 2 (5.9 %) |
| 3.1 to 4 | 30 (82.4 %) | 29 (76.5 %) | 23 (67.6 %) | 24 (70.6 %) |
| 4.1 to 5 | 2 (5.9 %) | 1 (2.9 %) | 7 (20.6 %) | 8 (23.5 %) |

*All values are Frequency (percent)*

Each of the three dimensions of the spiritual climate inventory was further divided into sub-domains. The data related eight sub-domains are represented in Table 8. It was observed that the mean score for all the-sub domains ranged between 3 and 4.

**Table 8: Team level means, standard deviations, and correlations of all variables under study**

| | | Mean | SD |
|---|---|---|---|
| 1 | Meaning-fulness | 3.71 | 0.68 |
| 2 | Meditativeness | 4.09 | 0.61 |
| 3 | Psychological Empowerment | 3.57 | 0.61 |
| 4 | Hope | 3.71 | 0.59 |
| 5 | Sense of Community | 3.88 | 0.44 |
| 6 | Autheticity | 3.53 | 0.41 |
| 7 | Concern for community | 3.48 | 0.42 |
| 8 | Transcedence | 3.63 | 0.64 |
| 9 | Learning in Teams | 3.7 | 0.71 |

**Testing hypotheses**

Nature of relationship between main domains of both spiritual climate inventory and learning in teams was assessed by bivariate correlation analysis. Table 9 gives the correlation between various dimensions of the spiritual climate inventory and Team Learning inventory. The results showed that the association of the aspects of spiritual climate, i.e. harmony with self, harmony in environment and transcendence to both aspects of learning in team; mutuality and collective reflection and experimentation were both positive and significant. Only the

correlation between Harmony with Self and Mutuality was not significant but was positive in direction. Correlation between spiritual climate of the team and average scores of team learning scores were significant at the less than 0.01 level and were positive in direction.

**Table 9: Correlation metrics of main dimensions of scales under study**

| | | Harmony Self | HarmoEnv | Trasceden | CollRef | Mutuality | TeamLearn |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| Harmony Self | Pearson Correlation | 1 | | | | | |
| | Sig. (2-tailed) | | | | | | |
| | N | 34 | | | | | |
| HarmoEnv | Pearson Correlation | .477** | 1 | | | | |
| | Sig. (2-tailed) | .006 | | | | | |
| | N | 34 | 34 | | | | |
| Trasceden | Pearson Correlation | .347 | .698** | 1 | | | |
| | Sig. (2-tailed) | .050 | .000 | | | | |
| | N | 34 | 34 | 34 | | | |
| CollRef | Pearson Correlation | .479** | .720** | .643** | 1 | | |
| | Sig. (2-tailed) | .006 | .000 | .000 | | | |
| | N | 34 | 34 | 34 | 34 | | |
| Mutuality | Pearson Correlation | .300ns | .601** | .525** | .742** | 1 | |
| | Sig. (2-tailed) | .095 | .000 | .002 | .000 | | |
| | N | 34 | 34 | 34 | 34 | 34 | |
| Team Learn | Pearson Correlation | .427* | .716** | .635** | .949** | .915** | 1 |
| | Sig. (2-tailed) | .015 | .000 | .000 | .000 | .000 | |
| | N | 34 | 34 | 34 | 34 | 34 | 34 |

*\*\*. Correlation is significant at the 0.01 level (2-tailed).*
*\*. Correlation is significant at the 0.05 level (2-tailed).*
*ns non-significant as p value>0.05*
*Harmony Self Harmony within self; HarmoEnv Harmony within Environment; trasceden Transcedence; CollRef Collective reflection & experimentation; Team Learn average scores for Learning in Team.*

To analyse this further, correlation analysis was preformed for various sub-domains of spiritual climate inventory as well as with learning in teams (Table 10). Pearson correlation analysis revealed significant but weak associations (r < 0.3) (p<0.05) between concern for community and meditativeness, between transcendence and hope and for sense of community and hope. Moderate positive associations (0.6 > r > 0.3) (p<0.05) were observed for spiritual climate domains like meditativeness, psychological empowerment, hope, sense of community and learning in teams. Strong positive association (r >0.6) (p<0.01) were seen between learning teams and meaningfulness, authenticity, concern for community and transcendence.

**Table 10: Correlation between the domains of spiritual climate inventory and team learning**

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Meaning-fulness | | | | | | | | |
| 2 | Meditativeness | .557** | | | | | | | |
| 3 | Psychological Empowerment | .625** | .444** | | | | | | |
| 4 | Hope | .313* | .703** | .335** | | | | | |
| 5 | Sense of Community | .368** | 0.2$^{NS}$ | .509** | .279* | | | | |
| 6 | Autheticity | .411** | .482** | .600** | .420** | .367** | | | |
| 7 | Concern for community | .426** | .259* | .568** | .389** | .447** | .552** | | |
| 8 | Transcendence | .641** | .345** | .588** | .286 * | .617** | .671** | .580** | |
| 9 | Learning in Teams | .623** | .482** | .590** | .423** | .374** | .654** | .646** | .681** |

*\*\* Correlation is significant at the 0.01 level (2-tailed).*

*\* Correlation is significant at the 0.05 level (2-tailed).*

The average scores were calculated for both the inventories; spiritual climate and team learning. Figure 1 is the scatter plot of the average scores. Correlation between average scores of spiritual climate inventory scores and their respective learning in teams scores was 0.73 at the p value of 0.0001 (Figure 1). Correlation coefficient supported significant positive association between learning in teams and spiritual climate inventory.

**Figure 1: Scatter diagram showing association between learning in teams and spiritual climate**
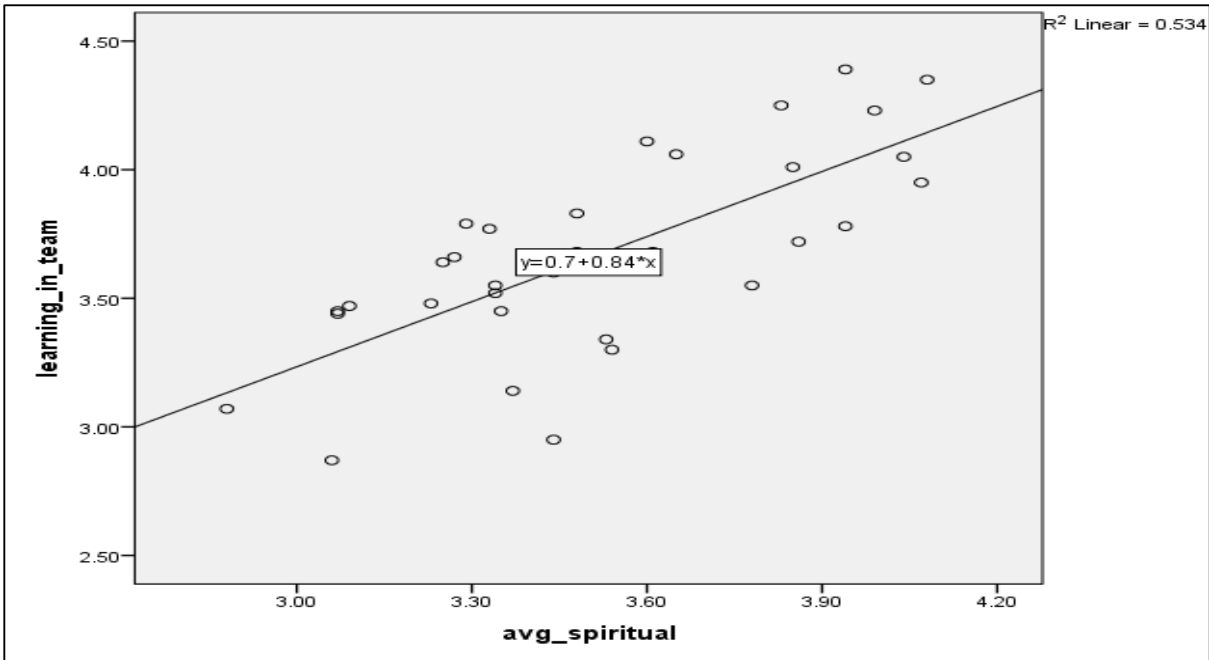


This section of the study aimed at falsification of hypothesized relationship between spiritual climate and learning in teams having spiritual climate as antecedent and learning in team as the consequent. In order to check the strength of causality four different regression analysis was performed on these scores. Three models tested the relationship of three dimensions of spiritual climate individually with team learning. Fourth is the full model which assessed the relationship between average scores of spiritual climate and team learning inventory. Summary of regression models is given in Table 11.

Correlation scores (R) obtained in above models supports the strong and positive direction of the hypothesized relationship between spiritual climate and Teams learning behavior.

Pearson's $R^2$ is the percent of variance in the dependent (Learning in Teams) explained by the given independent (Spiritual when unlike the beta weights) all other independents are allowed to vary. The result is that the magnitude of $R^2$ reflects not only the unique covariance it shares with the dependent, but also the uncontrolled effects on the dependent attributable to covariance the given independent shares with other independents in the model.

**Table 11: Regression model for spiritual climate and learning**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | F Change | Sig. | Durbin-Watson |
|-------|---|----------|-------------------|----------------------------|----------|------|---------------|
| Harmony with Self | 0.427 | 0.183 | 0.155 | 0.307 | 6.706 | 0.01 | 1.367 |
| Harmony in Environment | 0.716 | 0.512 | 0.496 | 0.270 | 31.495 | 0.00 | 1.817 |
| Transcedence | 0.635 | 0.403 | 0.383 | 0.299 | 20.233 | 0.00 | 1.569 |
| Full Model | 0.730 | 0.534 | 0.535 | 0.257 | 13.636 | 0.00 | 2.179 |

*The Model Summary table is SPSS output, shown above, gives R, R2, adjusted R2, the standard error of estimate (SEE), F change and corresponding significance level, and the Durbin-Watson statistic.*

$R^2$ is close to adjusted $R^2$ because there is only one independent variable. $R^2$ change is the same as $R^2$ because the variables were entered at the same time (not stepwise or in blocks), so there is only one regression model to report, and $R^2$ change is change from the intercept-only model, which is also what $R^2$ is. Since there is only one model, ''Sig F Change'' is the overall significance of the model. Significant F statistics indicate the overall significance of the model.

The Durbin-Watson statistic is a test to see if the assumption of independent observations is met, which is the same as testing to see if autocorrelation is present. As a rule of thumb, a Durbin–Watson statistic in the range of 1.5–2.5 means the researcher may reject the notion that data are auto correlated(serially dependent) and instead may assume independence of observations, as is the case here.

In the regression model above (Table 11), learning of team is predicted from spiritual climate. Harmony with Self predicted 15.5 % variance in team learning. The association was significant at 0.01 level. Thus H1 '*harmony with 'self' in team climate positively related to learning in team*' is accepted.

The second dimension of spiritual climate i.e. Harmony in Environment predicted 49.6 % variance. The H2 '*harmony with environment in team climate positively related to learning in team*' is accepted as the model was significant at 0.001 level.

Transcendence was also significantly and positively associated with team learning which explained 38.3 % variance. Therefore H3 '*transcendence positively related to learning in team*' is accepted.

Among the dimensions of spiritual climate; Harmony in Environment was found to be strongest predictor of learning in teams having explained 49.6 % variance. The model was significant at 0.001 level. Association of transcendence and Harmony in Self with learning in teams was also significant but not as strong as the Harmony with Environment. This output shows that full model with overall spiritual climate scores explained maximum i.e. 53.5 % of the variance in team learning for this sample. Overall findings substantiate our prediction about positive association between learning in teams and spiritual climate.

**Figure 2: Normal P-P Plot of Regression Standardized Residual**
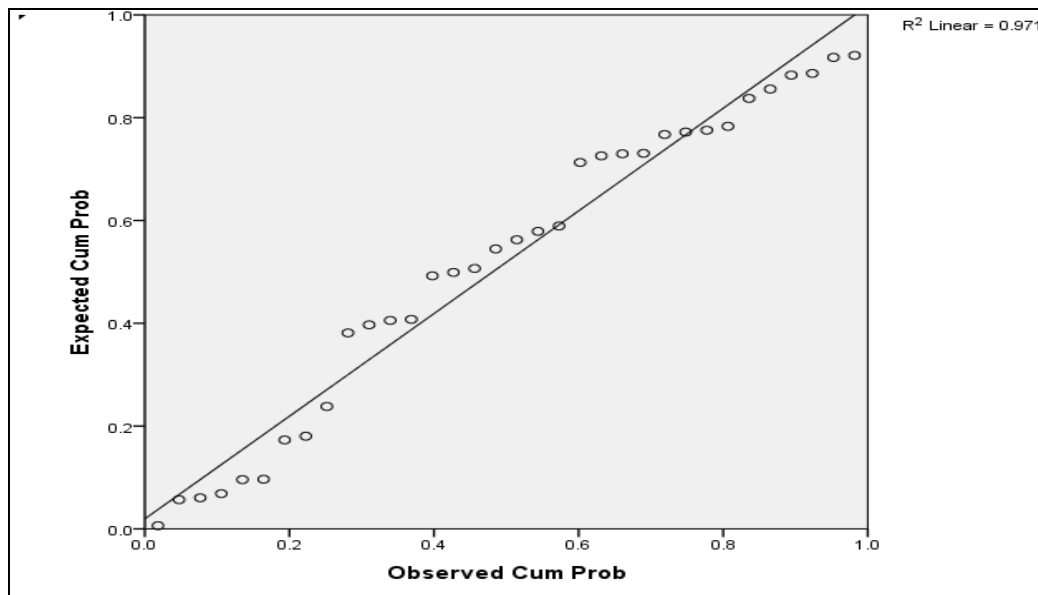


*Dependent variable: Learning in teams*

Findings of correlation and regression suggested that linear relationship between spiritual climate and learning in teams. Further the relationship is strong and positive indirection. In

order to clearly examine the impact of spiritual climate and learning in teams, the data were further statistically analyzed, i.e., t-test and Analysis of Variance, which are more sensitive and can bring out the difference in learning in team scores corresponding to spiritual climate scores more clearly.

Teams were classified as low and high based on spiritual climate scores using cut off at 3.5. Sixteen teams were classified in the category of high scores and 18 teams were in low category (Table 10).

**Table 12: Distribution of the teams based on spiritual climate scores**

|  | High spiritual score | Corresponding learning score | Lower spiritual score | Corresponding learning score |
|---|---|---|---|---|
| 1 | 3.5 | 3.66 | 2.88 | 3.07 |
| 2 | 3.53 | 3.34 | 3.06 | 2.87 |
| 3 | 3.54 | 3.3 | 3.07 | 3.44 |
| 4 | 3.6 | 4.11 | 3.07 | 3.45 |
| 5 | 3.61 | 3.68 | 3.09 | 3.47 |
| 6 | 3.65 | 4.06 | 3.23 | 3.48 |
| 7 | 3.78 | 3.55 | 3.25 | 3.64 |
| 8 | 3.83 | 4.25 | 3.27 | 3.66 |
| 9 | 3.85 | 4.01 | 3.29 | 3.79 |
| 10 | 3.86 | 3.72 | 3.33 | 3.77 |
| 11 | 3.94 | 3.78 | 3.34 | 3.55 |
| 12 | 3.94 | 4.39 | 3.34 | 3.52 |
| 13 | 3.99 | 4.23 | 3.35 | 3.45 |
| 14 | 4.04 | 4.05 | 3.37 | 3.14 |
| 15 | 4.07 | 3.95 | 3.44 | 2.95 |
| 16 | 4.08 | 4.35 | 3.44 | 3.6 |
| 17 |  |  | 3.48 | 3.83 |
| 18 |  |  | 3.48 | 3.68 |
| *High spiritual score represents scores >=3.5 and low represents <3.5 score.* | | | | |

The average Team learning scores of corresponding teams were compared through independent sample t-test. The difference in mean scores of Low (3.46±0.06) and High (3.90±0.08) was found to be significant at p values less than 0.05 (Table 11).

**Table 13: Comparison of mean scores**

| Group Statistics | | | | | |
|---|---|---|---|---|---|
| | Spirituality code | N | Mean | Std. Deviation | Std. Error Mean |
| Learning in team | Low | 18 | 3.4644 | .28258 | .06660 |
| | High | 16 | 3.9019 | .33957 | .08489 |

| Levene's Test for Equality of Variances | |
|---|---|
| F | Sig. |
| 1.585 | .217 |

**Independent Samples Test**

| | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | Lower | Upper |
| Learning in team | Equal variances assumed | -4.099 | 32 | .000 | -.43743 | .10672 | -.65481 | -.22005 |
| | Equal variances not assumed | -4.054 | 29.341 | .000 | -.43743 | .10790 | -.65800 | -.21686 |

Levene's test of homogeneity of variance tests the assumption that each group (category) of the independent (s) has the same variance on an interval dependent. If the Levene statistic is not significant at the 0.05 level, the null hypothesis that the groups have equal variances cannot be rejected significant score of t-test for difference of means support the main hypothesis that teams showing higher spiritual climate will have better learning in teams. Findings of t-test further strengthened the assumption that impact of spiritual climate is more pronounced in stream cases.

# CHAPTER - 7

## IMPLICATION FOR THEORY & PRACTICE

### DISCUSSION

Individuals working in business organizations, besides working for monetary and financial returns, seek meaning and purpose in their work and the opportunity to contribute to the larger social and natural environments. The spiritual climate construct is the reflection of this aspect of work. This study further validates the spiritual climate inventory and endorses the factor structure of this construct. The role of spiritual climate and its impact on learning at the collective level is a new area of inquiry in the field of management of business organization. The spiritual aspect of life is interpreted as seeing and relating to one's existence (Senge, 1990) and living in the world with responsibility (Vaill, 1998, p. 32). Learning is a process to create and to be a part of the generative process of life (Senge, 1990). Since team work has become an important feature of the functioning of modern organization, we discussed and examined the spirituality climate and learning at the team level in this study.

The present study identifies or rather revalidates the two overarching variables of learning in teams, in the form of *mutualit y* and *collective reflection and experimentation*. By examining spiritual climate at the team level, this study found general support for its impact on learning in teams. A reasonable degree of model fit and significant coefficients further show that there is a positive and significant link between spiritual climate and key outcome variables of learning in teams. These findings provide additional evidence that leadership that emphasizes spiritual well being in the workplace produces beneficial personal and organizational outcomes (Eisler & Montouri, 2003).

### IMPLICATIONS, LIMITATIONS AND FUTURE DIRECTIONS.

In this article, we re-examined the validity of spiritual climate as an umbrella term first proposed by Pandey et al. (2009). This construct is captured through various sub constructs spelled out in contemporary and traditional literature. Acceptance of the spirituality construct in this regard can open a new gamut of scientific inquiry in terms of its manifestations and impact. As a future area of research, it opens the possibility of studying the application of the interventions available in various spiritual traditions on different

aspects of professional and personal life (e.g. Agrawal & Anand, 2011;Yeganeh & Kolb, 2009).

The positive relationship found between spiritual climate and learning demonstrates that spiritual climate creates an experiential ambience within a team where in its members learn better with each other. More specifically people learn better when they find the work meaningful, experience a sense of community, and are collectively aspired to make positive contributions to the social or natural environment. This has implications on organizational development and management of change. Innovative work behavior can be one of the most immediate consequences of collective reflection and experimentation aspects of learning in team. Spiritual climate and learning in teams can enhance the group productivity directly and indirectly. This work also has implications on corporate social responsibility (CSR), environmental leadership, and alternative notions of capitalism. Some of the contemporary research studies (Nidumolu, Prahalad & Rangaswami, 2009) in the field of CSR extensively refer to social innovation and innovative business models, where business and the concern and care for social and natural environments are integrated. In socially inclusive and innovative businesses people find meaning and purpose at work and the opportunity to contribute to the larger environment that in turn would make the place where team learning also would be high. Identifying new business models, application of creativity, and quick learning are identified as major business challenges of the decade (IBM CEO Survey, 2010, 2012). The findings of this study suggest a positive association of these factors with spiritual climate.

## LIMITATIONS

This study suffers the natural limitation of analytical paradigm with a hypothetic co-deductive survey-based research design. It brings forth the connection between spiritual climate and learning through quantitative methods, but the generative mechanism of interaction of antecedent and consequent variables can be understood better through a qualitative research design under the interpretive paradigm. Since this study incorporates a sample from varied industries and organizations, it does not throw light on nuances of the proposed relationship in specific sectors or levels of the organization. This model is also mute on the applicability of the same in diverse or extreme conditions of work.

**FUTURE DIRECTION OF RESEARCH**

Future direction of research in the area may fall into different categories. First, the inherent mechanism of the proposed relationship needs further elaboration. For example, spiritual climate is found to be positively affecting the mutuality aspect of learning. This association might be mediated by psychological safety in teams, which requires further empirical inquiry. Similarly, learning in teams is considered as a unique construct in itself in the study; however, group learning might be a phenomenon of varied stages and levels that deserves further inquiry in a particular context of spiritual climate. Second, the proposed relationship needs to be examined in varied settings with appropriate hypotheses to enhance the robustness of the association. Third, the antecedents or drivers of spiritual climate and learning in teams need be identified.

# APPENDIX – A

**Learning in Teams Questionnaire (1 to 5 Rating on Agreement)**

Dear Respondent,
The following set of statements relate to your experience about your team. There are no 'right' or 'wrong' answers. Please read each statement and indicate at  the space given  in front of each question using following key :

Write :      5      if the statement truly represents your experience with your team
             4      if it is fairly true
             3      if it is somewhat are
             2      if it represents very little
             1      if it is not at all true

1.   My team functions in an integrated way

2.   My team works with clear focus on objectives

3.   Team targets and timelines of delivering results are mutually decided

4.   Team members  recognize the importance of each others work

5.   Team  members  rely and bank upon each other competencies and expertise.

6.   Plans are made taking into account constraints and problems at operating levels

7.   Team members feel committed to the team plans

8.   The team leaders is connected to the ground reality on which team operates

9.   In my team people are sensitive to each others needs.

10.  In my team people are aware and respect  each others' talent.

11.  In my team people learn from each other freely.

12.  My team prepares long term plans and work on realizing these.

13.  Team  members  participate extensively in periodic reviews of strengths, weaknesses, opportunities and threats.

14.  Dialogue and  discussion are used extensively to develop understanding of new plans and  programmes  for the team.

15.  In my team people get support for experimentation.

16.  In my team people show openness for new ideas.

17. In my team creative ideas are discussed and applied to work.

18. We are aware of the latest developments in the work being done by similar teams in our own and outside organization.

19. My team members adapt themselves according to new ways of working.

20. Members in my team keep developing new capabilities.

21. Knowledgeable outsiders are invited to share their ideas with team members.

# APPENDIX – B

**Spiritual Climate Inventory (Pandey et. al. 2009)**

***Instructions :*** Taking this Inventory will help you to assess the climate of the unit or work group where you work. The questions represent different dimensions of the organizational climate. There are no "right" or " wrong" answers. Please read each statement and fill in the blank space how you feel about that statement, using the following keys :

Write:      5      The statement truly represents your experience about your work or work

group

4      The statement is usually true

3      the statement is sometimes true.

2      The statement is not representative of the work group most of the time.

1      The statement is not at all true.

**Harmony with Self at Work**

_____ 1.  My job helps me to understand my life's purpose.

_____ 2.  Working here makes my life meaningful.

_____ 3.  Working here is a means for realizing my real self.

_____4.  Work itself is enjoyable for me.

_____5.  I am deeply involved in my work here.

_____ 6.  I feel frustrated after working here (reverse).

_____ 7.  People here feel that they are in charge of their own destinies.

_____ 8.  People here are able to use their talents at work.

_____9.  People in the group/department are able to apply their creativity at work.

_____10. People generally believe that business targets of the group/department

can be achieved.

_____11. People doubt the success of any new plan for business growth (reverse).

**Harmony in Work Environment**

_____12. When. stuck with a problem, people feel free to ask for (choose a

number for each one):

……..a.  advice from colleagues

…….b.  advice from a superior

…….c.   help from their colleagues

…….d.  help from a superior

_____ 13.Peoples' actions here are aligned with their words.

_____ 14.People  own up to mistakes with others in the group.

_____ 15. Manipulation is the way people perform their jobs here (reverse).

_____ 16. Diversity of views is accepted in my group/department.

_____ 17. People here are concerned about each other's family responsibilities.


**Transcendence**

_____ 18. People here perform their duties as if they contribute to (choose a

number for one):

………a. the community

………b. the larger society

………c. mankind in general

_____ 19. People here try to avoid wastage of any kind (paper, electricity, etc.).

_____ 20. People are concerned about the natural environment while working here.

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