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Role of Leader's Emotional Intelligence in
Organizational Learning: A Quantitative Analysis

by

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A Thesis Submitted in Partial Fulfillment of the Requirements for the
Degree of Master of Science in Human Resource Development

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Abstract

Although most researchers have argued that a leader's Emotional Intelligence (EI) capability positively influences Organizational Learning (OL), this relationship has only been studied at surface level. Consequently, there is no clear mechanism explaining how leaders facilitate various sub-processes of learning at the individual, team, and organizational levels. In this study, we operationalize Goleman's (1998) mixed model of EI and 4I framework of learning proposed by Crossan et al. (1999) to shed further light on this connection. Our study follows a deductive approach, where a conceptual model is first developed through a conceptual literature review and then empirically tested using correlation analysis. Short versions of the Emotional Competency Inventory (ECI V.2) and Strategic Learning Assessment Map (SLAM) survey tool have been utilized to measure leader's EI and OL, respectively. This study makes significant contributions to scholarly research surrounding EI and OL as well as practice based application of leadership development and employee learning interventions, with a special relevance for learning organizations.

Keywords: Leader Emotional Intelligence, Organizational Learning, 4I Framework

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Chapter 1: Introduction

Background

Proponents of emotional intelligence (EI) have studied learning outcomes in connection with leadership theories, including, transformational leadership (Malik, Danish, & Munir, 2012), humanistic leadership (Gottlieb, 2006), transactional leadership, and charismatic leadership (Berson, Nemanich, Waldman, Galvin, & Keller, 2006). Emotional intelligence and emotional competencies exhibited by leaders, irrespective of their leadership style provide a direct evidence of their potential in enabling learning of job-related skills in employees (Opengart & Bierema, 2015). While these findings provide a plausible evidence of the role of emotional intelligence in learning, the mechanism explaining this connection seems to be under explored. Existing research on leader's emotional intelligence and organizational learning especially seems to be lacking at the team and organizational level (Berson et al., 2006; Wolff & Koman, 2007) in the context of organizational change and uncertainty (Gottlieb, 2006).

Emotional intelligence has been defined as, "the ability to recognize one's own feelings as well as the feelings of others, and to use this awareness to motivate oneself and to manage one's emotions and relationships" (Goleman, 1998, p. 26). An individual's emotional capability can be enhanced using special competencies, identified by Goleman as self awareness (accurately recognizing and assessing emotions in self), social awareness (accurately recognizing emotions in others), self management (managing emotions in self to guide rational thinking), and relationship management (managing emotions in others to develop interpersonal relationships).

Organizational learning has been studied from a change perspective and can be defined as, "a change in the organization that occurs as the organization acquires experience" (Argote, 2011, p. 1124). This learning can take place at any level of the organizational hierarchy –

individual, team, organization and even inter-organization (Grah, Dimovski, Snow, & Peterlin, 2016). Therefore, learning can be understood as a process of acquiring knowledge or skills at the individual level, which may be further developed through shared mental models at collective team level (Grah et al., 2016).

Research Problem

Thus far, the relationship between leader's emotional capabilities and organizational learning outcomes has not been studied using a specific framework. Majority of the research that exists has only captured the indirect effect of a leader's emotional (Gottlieb, 2006), social (Mayer & Caruso, 2002), and psychological capabilities (DeRoberto, 2011) on learning outcomes among the subordinates, by way of creating a knowledge sharing climate conducive to learning (Loon, Lim, Lee, & Tam, 2012). Attention to how the emotional intelligence of a leader influences learning in organizations or what aspects of a leader's emotional intelligence directly or indirectly influence organizational learning is sparse within the literature. Therefore, we consider it important to study a leader's emotional intelligence and its influence on learning within organizations more in depth. A correlation study will serve this purpose, thereby, expanding our knowledge about whether or not there is a direct relationship between the two variables.

Purpose Statement

The purpose of this study is to examine the relationship between a leader's emotional intelligence and organizational learning at the individual, team, and organizational levels within an organizational setting in various industries in the US and India. The study is primarily guided by two research questions:

- a) What is the relationship between a leader's emotional intelligence and organizational learning?
- b) What aspects of leader's emotional intelligence impact organizational learning at the individual, team, and organizational levels?

Methodology

We used non-experimental surveys as the strategy of inquiry. Personal characteristics of the respondents (both leaders and team members) were gathered by way of demographic questions (i.e., gender, years of experience, age, industry etc.). This information was important to this study because it was hoped that it would be possible to identify special leader and employee characteristics contributing to a weaker or stronger relationship between the emotional intelligence of leaders and learning outcomes among the subordinates. In the second part of the study, we asked leaders to self-report on 72 questions pertaining to their emotional intelligence. Emotional intelligence was defined by four main constructs of self awareness, self-management, social awareness, and relationship management, each of which was measured by a total of 18 sub-components as identified in the Emotional Competency Inventory (ECI v.2.0) questionnaire (Boyatzis, Golman, & Hay Group, 2002). To measure organizational learning, the direct reports of these leaders were asked to self report on 29 questions contained in the Strategic Learning Assessment Map (SLAM model) developed by Bontis, Crossan, and Hulland (2002). The survey items in this questionnaire are categorized into three levels of analysis (i.e., individual, team, and organizational), two types of learning flows (feed-forward and feed-back) and business performance.

This study follows a deductive approach where a conceptual model explaining the relationship between leader's emotional intelligence and organizational learning is first developed based in review of extant literature. This model is then tested using correlational analysis. Owing to the absence of concrete connection between leader's emotional competency and facilitation of learning sub-process, we found it imperative to build a conceptual link between the two constructs to lay a foundation for further empirical research.

Keywords	Databases	Selection criteria
Leadership, Emotional intelligence, Emotional quotient, EI, EQ, Emotional capacity, Emotional capability, Emotional competence, Organizational learning, OL, Learning organization, Employee learning, Team learning, Learning capacity, Learning capability	EBCOHost, ERIC, ProQuest, PsycINFO, SAGE online, Google Scholar, RIT libraries	Year range: 1990-2018 Scholarly and peer reviewed only Journals, dissertations and books only Conceptual, qualitative and quantitative articles only

Figure 1. Literature search process

To empirically test our hypothesized model, non-experimental, cross-sectional surveys were used as the strategy of inquiry. Surveys are critical to answering research questions and hypothesis that establish a relationship between two or more variables (Creswell & Creswell, 2018). Using surveys, a researcher can test association among variables of a given population, using a sample that represents the population (Creswell & Creswell, 2018). The data was analyzed using a combination of descriptive and inferential statistics. Descriptive statistics, such as, bar graphs were used for presenting the demographic information, trend analysis and

emotional intelligence results of the leaders while simple correlational analysis was used for testing the association between variables.

Significance of the study

The audiences of our research include general scholars, Human Resource Development practitioners, senior leadership/management and Training & Development policy makers. Our objective is to contribute to the scholarly literature on emotional intelligence and organizational learning by examining the connection that exists between the two constructs. In doing so, we hope to initiate a new stream of inquiry that will help future researchers who are interested in exploring how leaders can leverage their emotional capabilities to affect the four sub-processes of organizational learning. In terms of practical application, this article holds a special relevance for Human resource development professionals and learning organizations who are interested in developing their leadership talent from an emotional intelligence perspective. An understanding about what competencies of leader's emotional intelligence enable/facilitate individual and team learning in the organization could be paramount in making important decisions related to training and development interventions for leaders.

Thesis Statement

Although most researchers have argued that a leader's emotional intelligence capability positively influences organizational learning, this relationship has only been studied broadly. In this study, correlational statistics has been used to evaluate the degree of relationship between each of the constructs of leader's emotional intelligence and organizational learning. Based on the indirect evidence presented in the literature, we propose the following hypothesis:

Hypothesis 1: There is a positive relationship between a leader's emotional intelligence and the **exploration** process (consisting of intuition, interpretation, and integration) of organizational

learning

Hypothesis 1a: There is a positive relationship between social awareness and self management competencies of leader's emotional intelligence and intuition of ideas

Hypothesis 1b: There is a positive relationship between self awareness, self management and social awareness competencies of leader's emotional intelligence and interpretation of ideas

Hypothesis 1c: There is a positive relationship between self management, social awareness and relationship management competencies of leader's emotional intelligence and integration of ideas

Hypothesis 2: There is a positive relationship between a leader's emotional intelligence and exploitation process (consisting of institutionalization) of organizational learning

Hypothesis 2a: There is a positive relationship between social awareness competency of leader's emotional intelligence and institutionalization of knowledge

Chapter 2: Literature Review

Emotional Intelligence

Various definitions of emotional intelligence have emerged over time. Authors have studied emotional intelligence in the context of change (Callahan & McCollum, 2002), leadership skills (Leung, 2005), and emotional work (Opengart, 2005). For this study, we have adopted Goleman's (1998) definition of emotional intelligence which refers to "the ability to recognize one's own feelings as well as the feelings of others, and to use this awareness to motivate oneself and to manage one's emotions and relationships" (p. 26). There is sufficient evidence to believe that emotional intelligence can be a great source of productivity, especially from a leadership perspective (Feyerherm & Rice, 2002; Goleman, 1998; Prati, Douglas, Ferris, Ammeter, & Buckley, 2003). As for the social context in which employee learning takes place, individuals' emotions can serve as a tool to comprehend emotions in others (Shuck & Herd, 2012). Therefore, studying emotional behaviors in leaders and the implications of these behaviors for individual, team, and organizational learning will serve as an important link in the framework of learning (Shuck & Herd, 2012).

Simply put, emotional intelligence is an ability to use rational mind and emotions simultaneously. It does not mean that one should forget the mind or rational thinking and focus only on emotions, but use the mind to understand why certain emotions are happening and what they mean. According to McClellan and DiClementi (2017), "emotional intelligence is related to the use of components of mind associated with emotion as opposed to purely rational thought in the application of intelligence" (p. 197).

Theories and Models of Emotional Intelligence

Research on emotional intelligence relies on three principal models, identified as the ability model (Salovey & Mayer, 1990) and the two mixed models (Bar-On, 1996; Goleman, 1995). Over time, these models have evolved and many iterations have been made to match with academic advances in the field.

In Mayer and Salovey's ability model, emotional intelligence has been conceptualized as an ability that offers individuals a unique advantage over others in terms of processing emotion related information to guide informed thinking and action (Mayer, Salovey, & Caruso, 2008). This model rests on the belief that intelligence can be best understood as a form of ability. Consequently, just like mental intelligence, emotional intelligence can be used to reason emotions, identify patterns, and differentiate between rational and irrational, positive and negative emotions. A more evolved four branch model was proposed by the same researchers in 1997 which includes i) perceiving emotions in self and others to facilitate thinking, ii) understanding emotions, emotional language and signals, and iii) managing emotions in self and others to reach specific goals (Mayer & Salovey, 1997). These phases are laid out in order of complexity, meaning that perception of emotions takes place at the most basic level; managing emotions to reach goals is the most complex one, requiring a high level of skills and experience in emotional management (Mayer, Caruso, & Salovey, 2016). Emotional intelligence can be measured using Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).

The mixed model approach was put forth by Goleman (1995) and had five components, namely, self awareness, self regulation, self motivation, empathy, and social skills which were later consolidated in the 2001 model into four components – empathy and social skills collectively became relationship management because of their focus on social relationship

building (Leung, 2005). Goleman (1995) identified emotional intelligence as a set of specific competencies which help in effective recognition and management of emotions by leaders to create positive social change. Boyatzis and Goleman (2006) model of emotional intelligence has four components.

Self awareness is the first step and refers to the ability of knowing how one is feeling and using this thinking to further make sound decisions, assessing abilities correctly and showing self-confidence. Self management comes after one has gained an understanding of current emotions and refers to the process of controlling negative emotions like anger, and reinforcing more positive emotions like optimism to effectively handle the task at hand. The third step is social awareness which deals with the ability to sense what people are feeling, being able to see things from their perspective and understanding their needs. Finally, relationship management focuses on handling social relationships well by using skills to persuade, negotiate, lead, discuss, and cooperate (Goleman, 1998, p. 318).

Later in 1996, Bar-on based his work on Goleman's research and conceptualized emotional intelligence as emotional-social intelligence. According to this model, emotional intelligence is defined as "an array of interrelated social and emotional competencies and skills that determine how effectively individuals understand and express themselves, understand others and relate with them, and cope with daily demands, challenges and pressures" (Bar-on, 1996, p. 57). At the individual intrapersonal level, emotional intelligence refers to the ability of being aware of one's own emotions, strengths and weaknesses, and to express emotions accordingly. At the interpersonal level, it refers to understanding emotions in others and maintaining cordial relationships based on that understanding. Thus, being socially and emotionally competent

requires one to effectively manage personal, social, and environmental change (Bar-On, 1996, p. 14).

Leadership Styles and Emotional Intelligence

There are many studies that have analyzed different leadership styles and their compatibility with emotionally intelligent behavior. Transformational leadership has been found to be the most suitable type that possesses high emotional intelligence because of the presence of one component of transformational leaders, that is, charisma (McClelland & Diclemanti, 2017). Accordingly, transformational leaders have been found to be suitable for driving change and innovation because of their ability to lead employees with compassion (Berson et al., 2006). Transactional and laissez-faire leaders have been found to be appropriate for more stable business environments (Berson et al., 2006). Zhang, Cao and Wang (2018) believe that the relationship between authoritarian and management by exceptions leaders and emotional intelligence is weak perhaps because these leaders do not identify the value of personal interaction which is a critical component of social aspect of emotional ability. Despite these findings, some researchers still doubt if emotional intelligence can be attributed to one particular leadership style. In a study by Weinberger (2002), no correlation was found between emotional intelligence and transactional, transformational, or laissez-faire leadership. A possible explanation for this inconsistency could be that every leader has a behavioral repertoire (such as emotional intelligence) and they should be able to adjust their role as an emotionally intelligent leader according to the demands of the situation (Singh, 2015).

Opengart and Bierema (2015) proposed a model of Emotional Intelligent Mentoring (EIM) which mentions that leadership in organizations can be seen from the angle of mentorship, involving interpersonal interactions and focused on employee's career options. Emotions form a

basis for social and interpersonal interaction between mentor and mentee and thus, emotionally intelligence mentors have an ability to drive powerful outcomes including employee learning. Furthermore, high and low levels of EIM dictates the level at which this relationship proves to be successful.

Inspirational Influence Model proposed by McClelland and Diclemanti (2017) explains the process of leadership effectiveness using emotions in four steps. The first step, leaders become aware of their own, other's emotions, and potential for emotions in a given context. This happens by subconsciously reacting to stimuli (an emotionally charged event) such as a business process change or employee lay off. This subconscious reaction is converted into a conscious realization by noticing behavioral changes in others (such as anger, depression or anxiety). In the second stage, leaders use resonance to manage their own and other's emotions simultaneously to exercise positive influence on them. In the final step, leaders use other's emotions to bring positive change in their own behaviors while utilizing their own emotions to guide their influential power on others.

Organizational Learning

Conceptualization of organizational learning has evolved through the years. Crossan, Lane, and White (1999) proposed the concept of "strategic renewal" which is defined by an organization's effort in consistently trying to maintain a balance between exploration of new information and exploitation of existing knowledge. Exploration is the process of initiating new ideas and creating new knowledge; exploitation means using this knowledge which is now stored in the form of systems and processes (Crossan et al., 1999). Elkjaer (2004) expanded the existing theory to include acquisition (information acquisition from various internal and external sources) and participation (development of meaning by sharing of ideas). These processes result in

development of experience, followed by knowledge creation by inquiry and these two collectively define organizational learning (Elkjaer, 2004). Flores, Chang, Rau, and Thomas (2012) also conceptualized learning from a renewal perspective. Their definition included the phases of information acquisition, distribution, interpretation, integration, and organizational memory.

More recent research in this field is related to learning processes (Argote & Miron-Spektor, 2011; Grah et al. 2016), a leader's role in promoting organizational learning (Berson et al., 2006), and organizational culture as an antecedent to employee learning (Park & Kim, 2018). In the words of Basten and Haamann (2018), culture has a significant impact on employee learning by way of dictating problem solving, experimentation, learning from past experiences, learning from others, and knowledge transfer. One major attribute of organizational learning is the presence of an information repository or a body of corporate knowledge through which transfer, sharing, utilization, and exploitation takes place and this collectively make up the organizational culture (Confessore & Kops, 1998).

Learning Organization and Organizational Learning

Organizational learning has been defined as a process of acquiring, retaining, transferring, and renewing information within an organizational context (Crossan et al., 1999). This process is influenced by both internal (management practices, processes, system variables) and external factors (technological changes, competition, policy changes, market uncertainty). A firm that continues the learning process in the long term as a coping mechanism to shifts and changes happening in the outside environment, ultimately becomes a "Learning Organization". Many organizations in today's competitive business environment seek to adopt the strategy of a learning organization to gain an edge over their competitors.

The terms “learning organization” and “organizational learning” are sometimes used interchangeably. According to Marsick and Watkins (2003), a learning organization is one that learns and transforms itself. This transformation occurs as a result of experience, which Argote and Miron-Spektor (2011) define as a cumulative number of task performances that have the ability to transform an organization as the tasks are being performed.

Organizational Levels and Organizational Learning

Organizational learning can take place at three levels of the organizational hierarchy - individual, team, and organizational. At the individual level, new ideas are generated (Berson et al., 2006; Flores et al., 2012) when individuals engage in critical reflection and understanding of the past. This understanding is further explored at the team level through active discussion and inter-team communications where new interpretations of these ideas emerge. Finally, this interpreted information is converted to knowledge and distributed across divisions and departments at the organizational level. It is at this stage that the knowledge is converted into formal documentation to guide future learning. The movement of ideas from individual to organizational level take place in a linear and continuous fashion rather than a top-down or bottom-up fashion (Berson et al., 2006).

Frameworks of Organizational Learning

Song and Chermack (2008) proposed a model for organizational knowledge formation. As per this model, group feedback is a component necessary to regulate the process of learning among groups (which are referred to as social systems). Type of feedback correlates directly with the type of learning - adaptive, generative or transformative. Adaptive learning is one in which an individual reacts to stimuli immediately to adapt himself accordingly and this where implicit knowledge is created via environmental contact. Generative learning is caused purposefully when individuals act proactive to create explicit knowledge, skills, and abilities via

social interactions. Finally, transformative learning is one that enables an individual to transform himself into a brand new entity via critical thinking (Song & Chermack, 2008).

Siren (2012) highlighted the concept of strategic learning and provided a comprehensive measurement tool to assess the validity of the idea of strategic learning. Strategic learning is a type of learning that allows an organization to continuously convert its past experiences and existing knowledge into strategies in order to overcome market uncertainties (Siren, 2012). Strategic learning is thought to be generated by strategic forces present within a context that enables learning at individual, team, and organizational levels. Key knowledge processes are identified as creation, distribution, interpretation, and implementation. At the basic individual level, strategic knowledge is created by studying the external environment and this novel identification of ideas acts as a strategic breakthrough in the current strategic thinking of the organization. In the knowledge distribution phase, information is amplified through social interactions like dialogue or debates. This is the starting point for organizational members to start interpreting this information. The knowledge interpreted at the team level provides a strategic sense-making ability to identify and successfully manage future uncertainties in the working environment. Finally, this knowledge is embedded into systems and processes through collective action.

In contrast, Argote and Miron-Spektor (2011) take an experiential approach to learning formation. According to this framework, organizational learning happens as the organization acquires experience. Thus, change in knowledge is manifested in the form of changes in both cognition as well as behavior, and may include tacit and explicit components. However, behaviors can only capture knowledge that is explicit in nature; implicit components of knowledge require application of knowledge in the form of actions/performance.

According to the learning model proposed by Argote and Miron-Spektor (2011), the internal organizational context consists of active (employees, tools) and latent (culture, goals, structures) components. These active and latent factors help convert the information created by task, performance, and experiences into knowledge; this knowledge is then embedded back either into the active components or the latent components. In this way, the process of learning continues in a loop. Sometimes, new knowledge is driven into the outside environment through knowledge transfer. Therefore, there is both an inward and an outward flow of knowledge from and into the external environment, suggesting that knowledge can be shared within different organizations via imitation.

The 4I Framework. The 4I framework of learning was proposed by Crossan et al. (1999) and is built on the foundation of learning sub-processes that result in creation and retention of knowledge within the system of a learning organization. The four major sub-processes involve intuition, interpretation, integration, and institutionalization. Intuition takes place at the individual level, whereby, individuals try to recognize patterns in their personal experiences (that form a basis for their actions and performance). Intuition is generated in the subconscious mind so depending upon the richness of an individual's experience, deliberation and planned decision making are no longer needed. A sense of what needs to be done in a particular situation comes naturally to a person as they have witnessed similar situations in the past. However, the information at this point is still tacit and requires metaphors (transfer of information from previously familiar situation to an unfamiliar area) that helps conversion of intuitive insights into shared understanding.

Interpretation phase allows for changes in actions and understanding of information stored in the subconscious mind as individuals begin to develop cognitive maps about the

conscious elements. Hence, the process is no longer subconscious and is constantly affected by the environmental context. Different people may react to stimuli differently and, therefore different interpretations of the same phenomena may emerge. These ambiguous interpretations are further resolved through group integration.

Integration is a group process where dialogues, meetings, and conversations enable individuals to discuss, make mutual adjustments, and negotiate existing interpretations. Context is highly important in this phase since the ability to integrate and interpret information depends on the context in which employee learning occurs. Stories and communities of practice are primary sources of this learning.

Institutionalization is the last sub-process where patterns of interactions and communication starts to formalize in the form of documentation, routines, and practices. Knowledge institutionalization refers to the process of utilizing the knowledge by converting it into practices that are permanently institutionalized into the organizational setting (Flores et al., 2012). The knowledge that was developed through intuition, interpretation, and integration is invested into infrastructure and information systems. Employees may come and go but the intellectual ability stays inside the organization in the form of these routines, which, when practiced continuously acts as a guiding mechanism for future organizational learning.

Flow of information from intuition to interpretation and from interpretation to integration utilizes the mechanism of creativity and innovation, while the movement of knowledge from integration to institutionalization utilizes routines, knowledge transfer, and incremental adaptation.

Leader's Emotional Intelligence and Organizational Learning

Learning is an outcome of change in practices, behaviors, actions, thoughts, and mental modes. Change could also be an outcome of learning. Hence, the process of learning and change

are interconnected. Many researchers have linked leadership and high emotional capabilities to leaders' social forming (relationship) behaviors (Gottlieb, 2006; Mayer & Caruso, 2002). People high in emotional intelligence desire greater social involvement and this has major implications in an organizational social setting, where productivity, performance, and learning are the primary outcomes of social relationships within manager-subordinate dyads (Mayer & Caruso, 2002).

Additionally, leaders are responsible for creating a climate that is conducive to employee learning (Castiglione, 2006; Loon, Lim, Lee, & Tam, 2012). When leaders possess considerable emotional skills in addition to technical competence, they can motivate employees by providing them a psychologically safe environment (Edmondson, Bohmer, & Pisano, 2001). This environment leads to innovation and communication. When employees are motivated, they are challenged to try new possibilities of work because of the inquisitive desire created by the leader.

Scholarly literature suggests that emotions play the most significant role when constant changes occur within an organization. Malik et al. (2012) posit that team learning is required during uncertain times because team communication becomes a prerequisite for instigating new ways of learning in teams and individuals. They found that emotional recognition and emotion utilization constructs of leaders' emotional intelligence were positively related to team communication that further enhanced group learning. "Understanding the role of EI in establishing learning cultures, specifically related to team performance, may provide valuable information on a leader's practices to prepare organizational responses to environmental change" (Gottlieb, 2006, p. 2). Therefore, simultaneous investment in emotional management and learning activities should be made to enable employees to deal with external changes.

Gottlieb (2006) highlighted sociological and psychological behaviors of a leaders' emotional intelligence. Humanistic nature of leaders enables them to create a psychological bond

with the team members and this helps in strengthening the leader-employee relationship (Edmondson et al., 2001; Gottlieb, 2006). Sociological abilities open communication channels. This is particularly valuable in a knowledge based organization, where open ideas and communication takes place due to the flatter structure. Psychological behaviors allow one to be aware of other's needs and empathize with them in times of changes. Thus, a transformational leader with high emotional intelligence balances individual and organizational needs (Hess & Bacigalupo, 2010).

When changes occur, a continuous flow of communication takes place from leaders to employees and within teams that leads to creation, retention, and transfer of information. Both quantitative (Castiglione, 2006; Loon et al., 2012; Malik et al., 2012; Mayer & Caruso, 2002) as well as qualitative (Edmondson et al., 2001; Hess & Bacigalupo, 2010) studies have found a direct positive relationship between leader's emotional intelligence and team/individual learning outcomes. A study by Gottlieb (2006) found a variance of 30% in organizational learning in teams that was explained by managerial emotional intelligence (p. 156).

However, none of these studies have examined leader's emotional intelligence and organizational learning using the 4I framework. Considering the fact that research on learning processes is limited, we see immense scope for building a connection and bridging the gap between a leader's emotional intelligence and organizational learning process. Learning happens in a continuous cycle via distinct learning sub-processes of intuition, interpretation, integration, and institutionalization. These sub-processes individually dictate the exploration process (which is guided by creativity, innovation, and change) and the exploitation process (which is guided by internal organizational change resulting from routines, knowledge transfer, and incremental adaptation). Therefore, we hoped for our study to be able to explain what specific emotional

competencies (such as self-awareness etc.) should be required by leaders to facilitate the exploration and exploitation process individually.

Theoretical Framework

Leader's Emotional Intelligence and 4Is of Learning

Organizational learning happens in a continuous cycle via distinct learning processes of intuition, interpretation, integration and institutionalization. These sub-processes dictate two types of knowledge creation processes: i) exploration process which is guided by creativity, innovation, and change, ii) exploitation process which is guided by routines, knowledge transfer and incremental adaptation (Berson et al., 2006). In the following section, we present what emotional competencies of a leader's emotional intelligence are required for exploration and exploitation processes individually.

Leader's Emotional Intelligence and the process of Exploration

The phase of Intuition. When individuals try to imitate their past experiences through critical reflection, learning takes place through emotional behaviors that may include anxiety, uncertainty, and discomfort because the context in which they apply this known experience is different. Hence, pattern recognition as a result of this process may bring new content that needs to be understood in an uncertain context. The reflection phase itself entails emotional context (Clarke, 2009) as employees may feel pessimistic about certain ideas and may be reluctant to apply them in the current situation. For example, when the HR department tries to implement a new policy, it may hesitate to repeat old procedures because the labor laws have changed and may mean undertaking a different approach altogether for the first time. Since this approach is not backed by past successes, HR professionals may feel apprehensive about getting the desired results. This is when, an emotionally intelligent leader is able to identify these negative emotions

in employees and provide them the necessary support to overcome uncertainty through optimism and motivation. In this manner, social awareness of leaders directly impacts idea generation by employees.

Unlike planned learning in which every new idea is tested for its relevance, in situations where quick action needs to be taken in a completely different context, employees often have to rely on their intuitive senses and past known experiences related to that event to form meaningful inferences about the current situation. This brings a lot of uncertainty and confusion as employees may not be able to recognize patterns in their own experiences to see if similar information can be applied in the present context. Positive emotions such as confidence in past experience, optimistic outlook about a given context or openness to experimentation have to be reinforced, while negative emotions like fear of challenging the status quo by bringing old knowledge into new context have to be disregarded. When leaders sense these emotions in others, they can provide timely input which ultimately has the ability to alter team members' initial reaction to the stimuli (Lam & O'Higgins 2011). With leader's emotional guidance, employees decide if they want to convert past experiences into certain achievable actions since the context in which these ideas have to be implemented is still uncertain (Grah et al., 2016). Thus leader's social awareness is an essential component in the intuition phase because it is the starting point for any new ideas to emerge. Identifying emotions early in the process channels employees' behaviors into the direction of creative inquiry.

Intuition phase of the learning process is future oriented in nature whereby new possibilities that were previously not identified are explored and new goals are set (Grah et al., 2016). Leaders require self-management skills like achievement orientation so they can set high performance standards for themselves as well as their teams. Highlighting the importance of

transformational leaders in achieving future oriented business related goals, Jiang (2009) state that “these leaders lead to intellectual stimulation, act as a coach, as a result of which team goals become essential for self development and learning” (p. 66). Ultimately, commitment to these goals define the extent to which the employees feel positive about mastering job related knowledge and learning (Jiang, 2009). Leader’s own self-management trait of optimism allows them to sustain an optimistic outlook (Wolff & Koman, 2008) and believe that their subordinates’ subconscious knowledge will be effective in meeting the challenging task at hand. When employees experience positive emotions as a result of working with a highly emotionally intelligent leader, they become more committed, focused and highly receptive to new ideas.

The phase of Interpretation. Interpretation is a conscious cognitive process, whereby individuals form cognitive maps about the domains in which they operate. These cognitive maps or expectations guide their judgement calls about the stimuli they perceive (Berson et al., 2006). According to Leung (2005), empathy and listening skills are central to cognitive processes as they persuade people towards a common goal and see changes as opportunities. When an individual finds difficulty interpreting a given idea with relation to the context, leader use their listening skills to understand individual’s perspective. They also empathize with those who constantly struggle to identify the meaning behind what is consciously known to them. For this, leaders mainly rely on metaphors to provide meaning and context to the learning that occurs among employees (Berson et al., 2006). By sharing stories of their own experiences, they achieve buy-in from employees on various organizational endeavors. Their stories of success or failure guides team’s actions into the right direction, thereby making employees more creative as they start to comprehend and link different dots together concerning the present context and available information. This creativity helps them better understand their cognitive processes and

link it with organizational goals (Berson et al., 2006). Use of emotional intelligence allows leaders to facilitate cognitive processes by removing the emotional barriers and reinforcing emotional supports that accompany problem identification and opportunity recognition (Zhou & George, 2003). George (2000) provided an expanded view of how leaders use the self awareness and self management in the interpretation and creative thinking phase. Upon hearing ideas that may not seem very innovative or while providing constructive/negative feedback to their followers, leaders may require to keep their emotions such as irritation, frustration or disappointment at bay (George, 2000). Patience may also be required to encourage employees so they can process information that can potentially be implemented into work processes (George, 2000). Hence, accurate self awareness of emotions and their effective management by the leader would prove useful especially in phase of interpretation where ideas are still being processed.

The extent to which a person engages in critical thinking and reflection depends on their previous emotional experiences in similar situations. If the emotional experience is a recent one, it can be recalled easily, leading to higher reflection ability. According to Clarke (2010), it is this strength and duration of emotion experienced during the integration phase which decides the amount of time individuals spend finding the meaning behind a situation (p.137). Leaders must be emotionally capable of recognizing and managing positive emotions in employees in order to further encourage them to generate, decide upon, and choose appropriate creative ideas. When information passes from intuiting stage at the individual level and gets interpreted at the team level via exploration, leaders' relationship with the followers decide how successfully these ideas are interpreted and analyzed (Clarke, 2010).

The phase of Integration. After ideas have been interpreted, they have to be tested for their relevance through group communication. Employees would be encouraged to share new

ideas with team members only when they know that their ideas will be welcome by everyone on the team including senior officials. Emotionally intelligent leaders recognize this need and provide a highly secure climate for collaborating; an environment that is free of criticism, outright refusal, and discouragement. Respecting other team members, while being cooperative and sharing allows leaders to build utmost trust with their employees (Koman & Wolff, 2007). Contexts where members trust each other and/or feel psychologically safe have been found to promote employee learning (Argote & Miron-Spektor, 2011). In this way, leaders indirectly help employees create and refine new information.

Management of emotions by leaders is also important during integration as this phase is about bringing team members together and building communities of practice (Berson, et al., 2006). Leaders use storytelling to share stories with team members about their past experiences. The extent to which these storytelling strategies prove useful depends on how charismatically the leader is able to deliver them to the employees (Berson et al., 2006). Storytelling is a way for members to contribute to the discussion and learn from the stories shared. In certain situations, a leader may feel highly confident and optimistic (positive emotions) about a previous experience that they may want to share them as a motivational case study. Similarly, they may be feel pessimistic about a negative past experience which cannot be used as a motivating strategy to encourage the group. In recognizing what experiences to share with the team, leaders have to simultaneously recognize and manage their emotions. Argote and Miron-Spektor (2011) highlight the importance of emotion regulation in the organizational learning process by stating that affective states, that is emotions, enable a leader to make cognitive choices by deciding what information should be perceived as well as by analyzing a particular piece of learning as good-bad, pleasant-unpleasant and significant-insignificant.

Because each individual interprets the meaning of a stimuli in a different manner, the individual ideas interpreted have to be converted into shared understanding through collective action in the integration stage (Grah et al., 2016). However, this action is not possible unless the leaders use social awareness to identify emotions in employees pertaining to detachment from work, demotivation towards a group project or hesitation to share opinions (that may otherwise have an ability to foster creativity). Employees' sentiments and emotional involvement in work are correlated in the learning process (Singh, 2015). According to Singh (2015), the level to which employees are engaged in their work provides a direct evidence about how much they are willing to invest in their job. This investment may be in the form of mental connection, pride, time, and effort. Excitement in one's assigned tasks when an employee is fully engaged in their work further results in a behavioral action. This is when they engage in interpretation of information because they are motivated to advance their careers by bringing new ideas to the table. This offers them credibility and their efforts get recognized by senior management. They also feel connected with the leader who pushes them to perform their best by offering an emotionally conducive environment (Singh, 2015).

Social learning is a source of emotional engagement (Clarke, 2010). When individuals create new meaning from their past experiences through critical reflection and interaction with other team members, learning takes place through emotional behaviors that includes anxiety, uncertainty and discomfort. New knowledge creation as a result of this process brings new emotional content that needs to be understood through collaboration. Similarly, any disagreements or emotionally charged debates emerging from different diagnosis of roots of problem and direction of change can be avoided when leaders use their emotional intelligence to offer a common ground of understanding and action (Zhou & George, 2003). "Such leaders are

capable of appraising, understanding and managing conflicts and tension in groups and facilitating identification of common goals or direction as a focus for a group's creative efforts" (Zhou & George, 2003).

According to Berson et al. (2006), idea integration is facilitated by learning cultures created by leaders that encourage participation, openness, and psychological safety. Emotionally intelligent leaders use their relationship management skills of teamwork and collaboration (Wolff & Koman, 2008) to create a compelling vision that motivate individual team members to identify their own goals as that of their leader's (Argote, 2011; Castiglione 2006; Flores et al., 2012; Yoon, 2008; Yukl, 2009). When individuals know that their ideas will be openly heard, they feel open and psychologically safe to further share those ideas among others. "Contexts where members trust each other and/or feel psychologically safe have been found to promote learning (Argote & Miron-Spektor, 2011). Employees trust leaders who are supportive and are able to sense their emotions before providing useful inputs related to productivity. They take into consideration all individual opinions and do not allow employees feel detached from team endeavors. Thus, "organizational learning at the integration stage may be facilitated by leaders who help build the structural ties within the social network, thereby allowing themselves and followers to be conduits for information and learning" (Berson et al., 2006, p. 587).

In a study conducted by Ellinger, Watkins and Bostrom (1990), it was found that leaders help in organizational learning by shifting from a manager's role and adopting more personalized behaviors such as coaching (facilitator of learning). In order to act as a facilitator, leaders should be able to identify specific needs of the group and provide emotional, mental and intellectual support. Collaborative thinking that results from group identification of problems and opportunities, promotes group learning (Zhou & George, 2003). Since, integration is primarily

dialogue and discussion based inter-team conflicts have to be resolved through conflict management skills. Emotionally intelligent leaders are skilled at negotiating and resolving inter-team disagreements along with Initiating or managing change (Wolff & Koman, 2008). Hence, we make the following propositions:

Hypothesis 1 (H1): There is a strong positive correlation between a leader's emotional intelligence and the exploration process of organizational learning

Hypothesis 1a (H1a): There is a strong positive correlation between social awareness, self management competencies of leader's emotional intelligence and intuition of ideas

Hypothesis 1b (H1b): There is a strong positive correlation between self awareness, self management, social awareness competencies of leader's emotional intelligence and interpretation of ideas

Hypothesis 1c (H1c): There is a strong positive correlation between self management, social awareness, relationship management competencies of leader's emotional intelligence and integration of ideas

Leader's emotional intelligence and the process of Exploitation

The phase of Institutionalization. Institutionalization of the knowledge that was formed and created via intuition, interpretation, and integration is the first step in attaining the status of a knowledge-based organization because continuous accumulation of knowledge is the very essence of these organizations (Hess & Bacigalupo, 2010). The information stored in systems and processes may be further used to develop, manage, and transfer knowledge based products and services that may include documentation, design systems, business processes etc. Leaders help their teams capitalize on the knowledge embedded in systems, structures, procedures and strategies and use this information for future decision making (Siren, 2012). Viable options are

analyzed and used as strategies that result in concrete outputs, policies and processes (Siren, 2012). Hess & Bacigalupo (2010) highlights the role of leaders as one that balances individual and organizational interests and calls it as an “Organizational Development Strategy”.

In the institutionalization phase, newly created knowledge is transferred to organizational systems (Argote & Miron-Spektor, 2011; Grah et al., 2016). However, this process is time consuming and only the knowledge that is approved by the senior management is ultimately institutionalized. Time lag between the point when new knowledge is created unto the point when it is applied to work processes requires patience and can be very intimidating for the followers (Park & Kim, 2018). Therefore, employees may become impatient and uninterested during the knowledge approval phase if they do not see their ideas materialize during the early stages of the process. Moreover, there may be instances where creative knowledge was developed through multiple conversations and group dialogues among teams and cross-functional departments. When employees see their ideas rejected by the team or senior officials, they may lose hope and motivation of continuing with the learning process. This may ultimately lead to feelings of frustration and detachment from work. If the leader is emotionally aware, they can sense these emotions in employees. When employees see support coming from their leader, they develop a sense of commitment which forces them to look at opportunistic goals (Wolff & Koman, 2008) rather than getting disappointed with the rejection of their ideas.

Newly acquired knowledge is applied back into the context, through active facilitation of feedback loops (Grah et al., 2016). This implies and ensures that continuous learning takes place and there is no blockage along the way due to lack of feedback. This is highly important in times of uncertainty as employees may not be fully aware about which knowledge should be converted and applied back in the form of routines since the context changes more often during

organizational change (Grah et al., 2016). Employees may get confused and show apprehension when leaders are not supportive. Despite having a clarity on job roles, information application becomes an uncomfortable process for employees as they expect their leaders to constantly guide them. Leaders who are socially aware are able to understand others' needs and provide services to meet their needs through effective consideration (Wolff & Koman, 2008). Only when employees feel encouraged and motivated, will they be engaging in future information generation processes that replace the outdated knowledge. In this way, a leader's social awareness helps their teams apply and institutionalize the knowledge through knowledge transfer and routines. Hence, we propose the following:

Hypothesis 2 (H2): There is a strong positive correlation between a leader's emotional intelligence and exploitation process of organizational learning

Hypothesis 2a (H2a): There is a strong positive correlation between social awareness competency of leader's emotional intelligence and institutionalization of knowledge

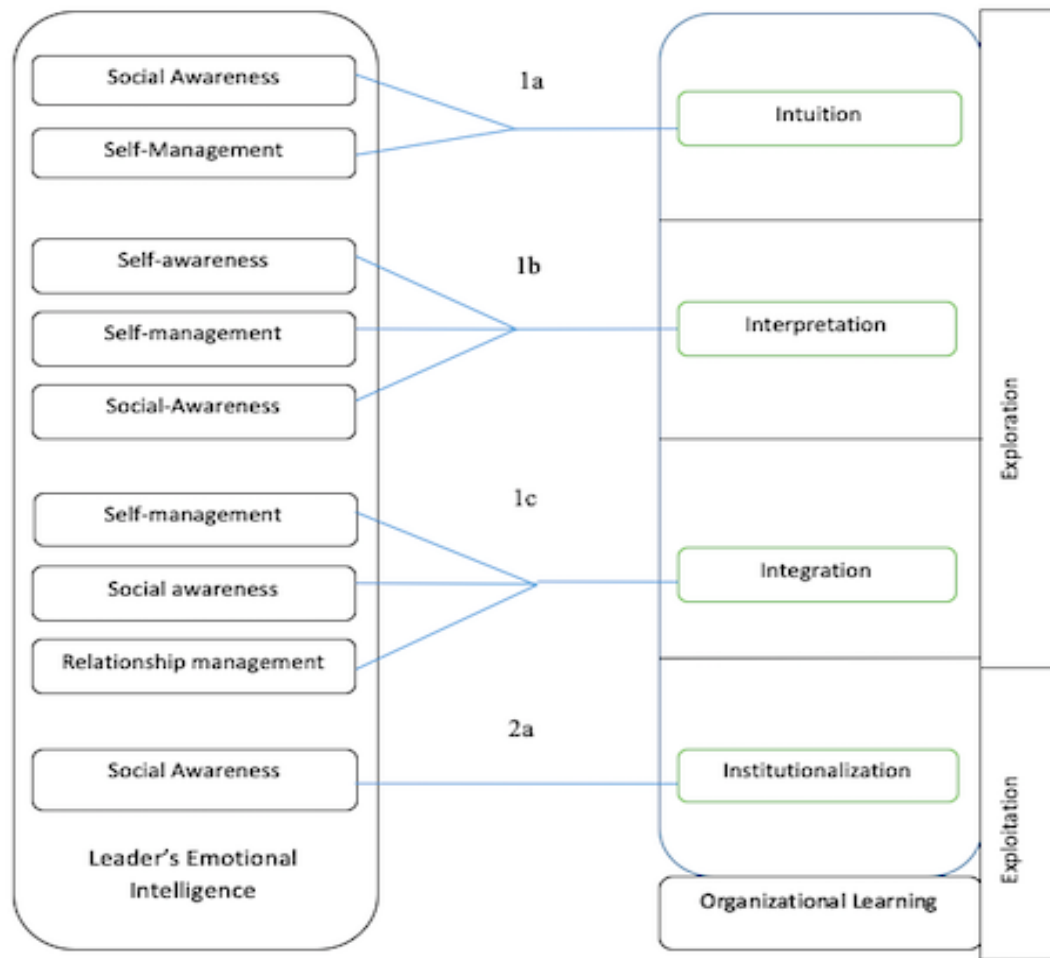


Figure 2. Theoretical Framework of Leader's Emotional Intelligence and Organizational Learning

Levels of analysis and the four learning sub-processes

The Strategic Learning Assessment Map (SLAM) was proposed by Crossan and Hulland (1997) and is based on the theoretical underpinnings of the 4I learning framework theory put forth by Crossan et al. (1999). When studied from a theoretical perspective, the 4I framework of organizational learning describes the learning sub-process of intuition as residing within the individual level, interpretation as residing within the individual and group level, integration

within the group and organizational level and finally, institutionalization within the organization level (Crossan et al., 1999). These key constructs have been operationalized and can be measured and tested using the SLAM model, which includes three learning stocks, two learning flows and a dependent variable known as “business performance” (Bontis et al., 2002). Contrary to the 4I framework, which explains the dynamic nature of organizational learning in a more complex fashion, the SLAM framework have simplified this understanding by equating individual, group, organizational level with the four sub-processes of intuition, interpretation, integration, and institutionalization (Bontis et al., 2002). Therefore, in this study, we analyze the relationship between leader’s emotional intelligence and organizational learning by studying the correlation with three learning stocks (individual, group, and organization) and two learning flows (feed-forward and feed-back). We then infer from our results, how emotional competencies would facilitate or influence the four individual sub-process of learning.

According to Bontis et al. (2002), the SLAM instrument provides a macro perspective of organizational learning as it relates to strategic renewal, that is, managing the tension between exploration of information and exploitation of knowledge. “Organizational learning provides a means to understand how the stock of intellectual capital which is dependent upon knowledge management, flows or changes over time” (Bontis et al., 2002, p. 440). Learning stocks are the stocks of intellectual capital that are stored within each level – individual, group, and organization. These stocks flow from one level to another via two learning flows – feed-forward and feed-back. The dynamic process of continuous tension between maintaining the exploration and exploitation process is referred to as a “flow”. This concept of organizational learning as a strategic renewal is found to be consistent with the conceptualization given by Crossan et al. (1999) and Grah et al. (2016).

As the four sub-processes operate at three different levels, they so naturally flow from one level to another, that it is difficult to comprehend and define at what level, a sub process starts and at what level it ends (Crossan et al., 1999). Unlike intuition and institutionalization which only operate at one given organizational level, the sub-process of interpretation and integration are shared between two levels at any given point in time. “Interpretation bridges the individual and group levels while integration bridge the group and organizational level” (Crossan et al., 1999, p. 525). We find a logical explanation of this overlap between levels from the 4I framework theory.

Interpretation is the process of explaining an idea (through words or actions) to oneself or to others. These subconscious notions or feelings can be comprehended using cognitive maps and assigning specific words to explain what they mean and the interpretation is often guided by the domain in which a person operates. Therefore, every person understands the stimuli differently. In order to further simplify this comprehension, language is often needed to explain one’s interpretation of the stimuli or phenomena (Crossan at al., 1999). Since, language is also the primary source of shared understanding and idea clarification, interpretation can also take place at the group level in addition to the individual level.

We know that integration is the mixing of independent ideas to develop a common ground for understanding. These group dynamics often help clear any ambiguity around the individual interpretations and provide team members with a clear course of action. For shared understanding to convert to common course of action, dialogue is necessary which usually takes place among members at the group level. With a view to further formalize these actions and embed them within the learning processes and systems, storytelling is used so that a memory or repository of information can be created for future learning (Crossan at al., 1999). Therefore,

integration takes place at the group as well as organizational level. Figure 3 shows how the individual sub-processes function at different levels of the organization in the SLAM model; II refers to individual intuition, GG refers to group integration, and OO refers to organizational institutionalization, while FF and FB denote feed-forward and feedback loops, respectively.

		Output		
		Individual	Group	Organization
Input	Individual	Individual-level learning stocks (II)	FF _{IG}	FF _{IO}
	Group	FF _{GI}	Group-level learning stocks (GG)	FF _{GO}
	Organization	FB _{OI}	FB _{OG}	Organizational-level learning stocks (OO)

Source: Crossan and Hlland (1997).

Figure 3. The SLAM Framework. Adapted from Bontis, N., Crossan, M. M., & Hlland, J. (2002).

Chapter 3: Methodology

Emotional intelligence is emerging as a core leadership trait that impacts individuals as well as the social systems in which individuals thrive. When leaders effectively channel their emotions to suit the needs of their followers, a change is triggered in the environment that surrounds them. Change in those who follow the leader is reflected in their learning process. Only a few research studies have studied the direct relationship between leader's emotional intelligence and organizational/employee learning (Castiglione, 2006; DeRoberto, 2011; Gottlieb, 2006; Hess & Bacigalupo, 2010; Loon et al., 2012; Malik et al., 2012; Mayer & Caruso, 2002; Pisano et al., 2001). In all these studies, however, the concept of organizational learning has been treated as a single outcome variable without exploring different stages by which information converts into learning. This study sought to investigate the relationship between each of the emotional competencies possessed by the leader and their effect on individual, team, and organizational learning. The 4I framework of organizational learning (Crossan et al., 1999) and the mixed model of emotional intelligence (Goleman, 1998) have been used to analyze this relationship. The SLAM model assessment of learning (Bontis et al., 2002) and ECI tool of emotional intelligence (Boyatzis & Goleman, 2002) have been used as measurement scales to measure the two variables.

This study follows a quantitative methodology and utilizes non-experimental survey as the research design. In a quantitative study, the objective of the researcher is to test a newly proposed or verify an existing theory by way of a deductive model of thinking (Creswell & Creswell, 2018). The type of information sought is usually pre-determined; data is collected on instruments with closed ended questions. This numerical data is then analyzed for supporting the proposed hypothesis.

Research Design

The primary purpose of this study is to empirically evaluate if there is a relationship between a leader's emotional intelligence and organizational learning in a sample of 56 leader-subordinate dyads. We use a quantitative research methodology for studying this relationship and employing a cross-sectional survey as a strategy of inquiry. A Strategy of inquiry, identified as "research paradigms" by Maxwell (2008), are specific methodologies that support the assumptions one makes about a research problem (Maxwell, 2008). A survey design is considered the most appropriate for quantitative studies where the aim is to test a directional relationship between two or more variables. Surveys provide a quantitative or numeric description of trends, attitudes, or opinions of a population by studying the sample of that population to generalize the findings (Creswell & Creswell, 2018). We further incorporate simple correlational analysis as a suitable form of data analysis because of the multi-variate nature of the variables involved in the study. A correlational analysis describes and measures the degree of association between X and Y variables or set of scores (Creswell & Creswell, 2018, p. 12).

Several factors contributed to our decision of using a survey design for this study. Firstly, since the study is based on the 4I framework of organizational learning and Goleman's conceptualization of emotional intelligence, we decided to use existing instruments for data collection because they are able to measure participants' responses for the individual items on the scale which can be later analyzed and tested through statistical analysis. Secondly, surveys were suitable from an administration point of view, especially in this age of technological advancement where unlimited number of surveys can be distributed to a geographically dispersed audience. Online administration further offers the advantage of accessing quicker and

reliable results. Thirdly, a survey ensures complete anonymity of responses and confidentiality of participants. According to National and National (2011), “pervasive concerns about privacy and confidentiality among many in US society hinder survey participation”. Therefore, online administration can remove this barrier by ensuring that the identity of those responding to the survey is protected. In addition, automation and real-time access in an online survey allows for quick collection/sorting of responses, saving ample amount of time for the researcher. Finally, access to geographically dispersed sample participants in both India and the US allowed for diversity responses as the participants represented different locations, companies, industries, countries, and cultures.

Research Approval

Prior to initiating the data collection process, an approval was obtained from the Institutional Review Board at the Rochester Institute of Technology (RIT). IRB’s approval is mandatory for any type of research that particularly involves direct or indirect participation of human subjects (in this case, leaders and their direct reports). All survey participants were asked to sign an informed consent form before taking the online survey as a way to ensure voluntary participation by everyone. An informed consent process provides detailed information about the study to the participants – the issue being investigated, participation demands (time required, eligibility etc.), participant’s rights (anonymity, confidentiality, voluntariness etc.), and any risks or benefits involved. No potential risks or benefits were identified in this study and the inclusion/exclusion of subpopulation was solely determined on the basis of subjects’ willingness to participate.

SurveyMonkey.com was used for developing and distributing the surveys. The platform does not disclose respondents’ identity either by way of email or through their IP address.

Therefore, complete anonymity of responses was ensured throughout the process of data collection. In order to maintain confidentiality of the raw data, all responses were tracked, downloaded from the website and stored in a password secured file in the researcher's personal computer device. The online responses collected on the website were also deleted once the data was transferred to the researcher's device.

Survey as a Strategy of Inquiry: Data collection

The survey items for emotional intelligence were taken from a sample version of Emotional Competency Inventory V.2 which was developed by Boyatzis and Goleman (2002) and distributed by Hays Acquisition Co. I, Inc. Organizational learning was measured using a sample version of the Strategic Learning Assessment Map developed by Bontis et al. (2002). Several factors affect response rate in online surveys and therefore, special attention was given to the visualization, personalization, order of the items, and an explanation of the variables being measured. Dolnicar (2013) posits that the presentation order of questions within the survey along with the answer options greatly affect the response rate. Furthermore, including closed ended questions with similar answer choices increases the likelihood of quicker and greater number of responses (Dolnicar, 2013). Items in both surveys were measured using five behavioral anchors namely, Never (1), Rarely (2), Sometimes (3), Often (4), and Consistently (5). An additional response choice "prefer not to answer" was included with each question to allow for a voluntary response. Although, this option is not a part of the original tool, we wanted to provide a free choice to the respondents in case they wanted leave a question item unanswered. Adding this response option did not affect the validity or reliability of the tool in any way.

An informed consent form explaining the purpose of the research study, time required, potential risks of the study, benefits of the study, participation requirements, incentives,

confidentiality and anonymity, voluntariness, and participants' rights to withdraw from the study was included on the first page on the online survey. The emotional intelligence survey contained seven demographic questions – gender, years of experience leading others, years of experience in the current team, number of direct reports, approximate age, company size and industry. The organizational learning survey contained six demographic questions – gender, years of work experience, years of experience in the current team, approximate age, company size, and industry. Demographic questions are important because they provide additional details that may prove useful in identifying specific characteristics of the sample or explain the differences between variables. Each item on the emotional intelligence and organizational learning survey was measured on a five-point Likert scale, ranging from 1 to 5 (assigned in an increasing order from never to consistently). Instead of providing numeric values, answer choices were presented with each question to avoid confusion.

Survey Method and Administration. This study uses a quantitative research design to explore the concept of emotional intelligence and organizational learning. Quantitative research is an approach for testing objective theories by examining the relationship among variables (Creswell & Creswell, 2018). These variables are usually measured using a survey instrument and the numbered data is analyzed using statistical analysis. Online surveys provide numerous advantages to researchers from the perspective of an easy administration process. Since, the participants were located in different parts of the US and India, we recognized that web administration would be the most appropriate way of collecting data from leaders and their teams. The survey administration process was carried out in three stages – first in November, 2019, second in December, 2019, and third in January, 2020. Survey links were created using survey monkey platform and were shared with the leaders and teams via email. Each survey link

contained a unique identifier which allowed us to match leaders' responses with those of their direct reports. The survey results were sent directly to the researcher and therefore only the researcher had the access to raw data.

Population and Sample. Since organizational context was important for this study, we decided to include leaders and their teams from various corporate settings in India and the United States. These two countries were selected because we had the convenience and advantage of reaching out to managers in these nations via formal/informal connections. Multi-stage sampling was used as the sampling design. According to Creswell & Creswell, in a multistage or clustering procedure of sampling is primarily used when participants are unknown. In this type of sampling, the researcher first identifies clusters, such as organizations or groups and then obtains the contact information of the participants from within that organization. Therefore, we first contacted the leaders and requested participation from them and their direct reports. Some of the HR managers and Department heads were able to share contact information for other leaders within their respective departments as well.

Recruitment of participants was carried out in three stages. First cycle of recruitment was completed in November 2019; RIT career services were reached out to recruit potential participants. A representative from the career services sent out an invitation email to 3000 employers across US on behalf of the researcher. Employers who expressed interest in participating were directly referred to the researcher. They were then briefed about the purpose of the study, benefits of participating, risks involved and the survey process in detail. Employers who could not guarantee participation from their direct reports were excluded from the sample. The second recruitment cycle was conducted during December, 2019 where various employers across the US and RIT alumni were reached out via LinkedIn, referenceUSA.com, and the book

of Rochester businesses called The Lists. In the third recruitment cycle that began in early January, 2020, the researcher reached out to the senior leadership at RIT and interested teams were included in the sample. Each leader was sent two online survey links (emotional intelligence and organizational learning) which took the respondent to Survey monkey website. The leaders were also asked to forward the organizational learning survey link to their direct reports.

A non-random sampling procedure was deemed to be a suitable approach for this study and therefore, only the teams interested in participating were sent the survey links. Research communication consisted of three steps – first, an email with the survey links and direction to complete the survey was sent to all leaders. First reminder email was sent after one week of sending out the initial email. In some cases, for teams who did not finish the surveys by the end of third week, a second and final reminder was sent at the end of week 3. In total, 56 leader-subordinate dyads agreed to participate in the survey. Therefore, a total of 112 survey links (for both emotional intelligence and organizational learning) were distributed for completion. 13 of the 56 teams did not respond back with survey responses which left us with 43 teams who responded back. Upon examining the survey responses, we found that 10 teams had sent back incomplete responses and therefore, were excluded from the sample. The criteria of incomplete responses were applied to each team as a whole which means that any team that contained less than one response to the organizational learning survey was also automatically excluded. In the end, completed surveys were gathered from 33 leader-subordinate dyads. Demographically, four of these dyads were based in India while the remaining 29 were based out of the US. The overall completion rate for emotional intelligence survey was 58.9%. Average completion rate for the organizational learning survey was 65.7%.

Table 1.

Organizational Learning Survey responses per leader

Leader	Total # of Direct Reports	# of OL Responses Received	Completion Rate
Leader 1	4	2	50%
Leader 2	7	3	43%
Leader 3	10	4	40%
Leader 4	4	3	75%
Leader 5	3	3	100%
Leader 6	3	3	100%
Leader 7	8	3	37.50%
Leader 8	5	4	80%
Leader 9	3	2	66.67%
Leader 10	8	3	37.50%
Leader 11	5	5	100%
Leader 12	6	4	66.67%
Leader 13	2	2	100%
Leader 14	3	3	100%
Leader 15	4	4	100%
Leader 16	5	2	40%
Leader 17	6	2	33.33%
Leader 18	6	5	83.33%
Leader 19	4	3	75%
Leader 20	5	3	60%
Leader 21	2	2	100%
Leader 22	2	2	100%
Leader 23	3	2	66.67%
Leader 24	4	2	50%
Leader 25	3	2	66.67%
Leader 26	4	2	50%
Leader 27	2	2	100%
Leader 28	3	2	66.67%
Leader 29	4	2	50%
Leader 30	2	2	100%
Leader 31	2	2	100%
Leader 32	2	2	100%
Leader 33	3	3	100%

Data Analysis

For the purpose of analyzing leader's emotional intelligence, we used ECI V.2.0 tool proposed by Boyatzis & Goleman (2002) and distributed by Hay Acquisition Company I Inc. (2005). The sample questionnaire contains a total of 72 items categorized into 18 distinct competencies within the 4 EI clusters namely, Self-Awareness (competencies include Emotional Awareness, Accurate Self-Assessment, Self Confidence), Self-Management (competencies include Emotional Self Control Transparency, Adaptability, Achievement, Initiative, Optimism), Social Awareness (competencies include Empathy, Organizational Awareness, Service Orientation), and Relationship Management (competencies include Developing Others, Inspirational Leadership, Change Catalyst, Influence, Conflict Management, Teamwork & Collaboration). Respondent's behavior is assessed on six behavioral anchors – 1 (Never), 2 (Rarely), 3 (Sometimes), 4 (Often), and 5 (Consistently).

There are two ways of analyzing each of the competencies within the four given clusters: Average high scores and Optimal levels. Average high scores usually calculate whether a person is emotionally intelligent or not based on the average-item scores. In order to be considered an emotionally intelligent individual, one must have a total EI competency score of six or higher, with at least one high level EI competency score in each of the four clusters (Hay Group, 2005). Below is the Average-Item norm for calculating the emotional intelligence scores as prescribed by the Hay Group.

ECI 2.0 Cluster	Competency	Low Range	Medium Range	High Range
Self-Awareness	Emotional Self-Awareness	< 3.10	3.10 to 3.54	> 3.54
	Accurate Self-Assessment	< 3.60	3.60 to 3.92	> 3.92
	Self-Confidence	< 4.20	4.20 to 4.45	> 4.45
Self-Management	Emotional Self-Control	< 3.78	3.78 to 4.07	> 4.07
	Transparency	< 3.50	3.50 to 3.84	> 3.84
	Adaptability	< 3.72	3.72 to 3.98	> 3.98
	Achievement	< 3.75	3.75 to 4.04	> 4.04
	Initiative	< 3.30	3.30 to 3.60	> 3.60
	Optimism	< 3.98	3.98 to 4.25	> 4.25
Social Awareness	Empathy	< 3.92	3.92 to 4.21	> 4.21
	Organizational Awareness	< 3.68	3.68 to 4.02	> 4.02
	Service Orientation	< 4.06	4.06 to 4.38	> 4.38
Relationship Management	Developing Others	< 3.66	3.66 to 4.03	> 4.03
	Inspirational Leadership	< 3.71	3.71 to 4.08	> 4.08
	Change Catalyst	< 3.63	3.63 to 3.93	> 3.93
	Influence	< 3.55	3.55 to 3.88	> 3.88
	Conflict Management	< 2.95	2.95 to 3.26	> 3.26
	Teamwork & Collaboration	< 3.98	3.98 to 4.25	> 4.25

Figure 4. Average-Item scores equivalent to high, medium, and low competency levels. Adapted from Hay Acquisition Company I Inc., 2005

Reverse scoring for items 6, 10, 13, 14, 29, 43, 58, 65 was done manually and was completed before the data file was transferred to SPSS for analysis. In order to interpret the scores for each competency item within the clusters, an average of all the items representing a given competency was calculated and this process was followed for all the other items on the instrument as well.

Table 2.

Emotional Intelligence Rating per leader

Overall Emotional Intelligence by Leader	Total # of High Level EI Competency Scores	Total # of EI Clusters Containing High Level Scores	Emotionally Intelligent?
Leader 1	11	3	<i>No</i>
Leader 2	11	4	Yes
Leader 3	10	3	<i>No</i>
Leader 4	12	4	Yes
Leader 5	15	4	Yes
Leader 6	2	1	<i>No</i>
Leader 7	4	3	<i>No</i>
Leader 8	11	4	Yes
Leader 9	9	4	Yes
Leader 10	9	4	Yes
Leader 11	12	4	Yes
Leader 12	12	4	Yes
Leader 13	10	4	Yes
Leader 14	2	2	<i>No</i>
Leader 15	8	3	<i>No</i>
Leader 16	9	4	Yes
Leader 17	8	4	Yes
Leader 18	3	2	<i>No</i>
Leader 19	14	4	Yes
Leader 20	9	4	Yes
Leader 21	15	4	Yes
Leader 22	0	0	<i>No</i>
Leader 23	5	3	<i>No</i>
Leader 24	4	4	<i>No</i>
Leader 25	3	2	<i>No</i>
Leader 26	8	4	Yes
Leader 27	14	4	Yes
Leader 28	1	1	<i>No</i>
Leader 29	12	4	Yes
Leader 30	14	4	Yes
Leader 31	12	4	Yes
Leader 32	9	4	Yes
Leader 33	10	4	Yes

Strategic Learning Assessment Map (SLAM model) proposed by Bontis et al. (2002) was used to assess organizational learning at the individual, group, and organizational levels. The sample version of this questionnaire contains 29 items that measure five theoretical constructs: i) three learning stocks - individual, group, and organization, ii) two learning flows – feed-forward and feed-back. Learning at each of these three levels is stated to be related with business performance which is an independent construct on the SLAM questionnaire. For each item, we used the behavioral anchors on a five-point Likert scale, namely 1 (Never), 2 (Rarely), 3 (Sometimes), 4 (Often), and 5 (Consistently). Since, all the items in the questionnaire were positive, we did not find any need to use reverse scoring.

Validity and Reliability. This study used existing tools to measure leader's emotional intelligence and organizational learning. Since the tools were already validated and checked for reliability, we only checked for the user-friendliness of the survey links by conducting a pilot study with ten students at RIT. Based on the comments and recommendations made by the students, changes were made to ensure that the survey web page was attractive, informative, and contained all elements of an ideal survey. RIT banner and logo were included to enhance the visibility of questions and make the survey page more presentable to the survey taker.

Emotional Intelligence was measured using the Emotional Competency Inventory (ECI v.2) proposed by Boyatzis and Goleman (2002) and distributed by Hay Group, Inc. The reliability of any instrument is generally assessed on two indicators: test-retest reliability and internal consistency. While test-retest reliability refers to the stability of the item measures overtime, internal consistency measures the average of inter-correlations between items of the single test. Cronbach's Alpha internal consistency coefficient for ECI V 2.0 was found to be 0.78 for other's ratings (i.e. 360 degree rating of leader's EI) and 0.63 for self ratings (i.e. leader's self

rating of emotional intelligence). Accordingly, reliability was found to be higher for other's ratings compared to self-ratings of the instrument (Hay Group, 2005). Validity of ECI V 2.0 has been assessed by measuring its meaningful relationships with various other variables, such as leader, work related behavior, personality, cognitive ability, team/organizational performance (Hay Group, 2005).

Organizational Learning was measured using the SLAM learning model proposed by Bontis et al. (2002). This instrument has been tested using a number of survey administrations among senior, medium and non-management individuals. The language used to develop the instrument was kept at the comprehension level of high school and all items were designed at a medium length to allow for easy understanding by the audience. Cronbach's alpha for reliability was found to be 0.9 and construct validity was found to be 0.6. The SLAM instrument incorporates all of the key dimensions and content areas prescribed by the ASTD guide (Bontis et al., 2002).

Data Analysis Process

Descriptive statistics, that is, simple correlation was conducted to test the proposed hypothesis of the relationship between leader's emotional intelligence and organizational learning. Emotional intelligence competencies of self awareness, self management, social awareness, and relationship management were treated as independent variables, while organizational learning constructs of individual level, group level, organizational level learning stocks, feed-forward and feedback learning flows, and business performance were treated as dependent variables. All survey items on the ECI V 2.0 questionnaire and SLAM questionnaire were measures on a five-point Likert scale ranging from Never (1) to Consistently (5). Correlational analysis was carried out directly on the scaled responses received from the leaders

and their employees. Extending the work of Crossan and Hulland (1997), Bontis et al. (2002) operationalized the 4I framework to include the sub-processes of intuition and interpretation under the individual level, sub-processes of interpretation and integration under the group level, and sub-process of institutionalization under the organizational level. Since, there is no instrument currently available that directly measures the four sub-processes of organizational learning, the operationalization by Bontis et al. (2002) can be used as a credible instrumentation because it effectively captures the four sub-processes under the individual, group, and organizational levels of analysis (Bontis et al., 2002). Therefore, the response scores from the individual, group, and organization learning stocks can be inferred to represent the sub-process of intuition and interpretation, interpretation and integration, integration and institutionalization, respectively.

We used descriptive statistics to calculate mean and standard deviation for the two variables under study, leader's emotional intelligence and organizational learning. Also, for analyzing the demographic information of respondents, bar graphs were used to present the results. We presented the demographic information from both the questionnaires in two separate categories: Emotional Intelligence (for leaders) and Organizational Learning (for team members).

Chapter 4: Results and Findings

In this section, we have presented the results from the statistical analysis that we conducted from the ECI V 2.0 Emotional Intelligence tool and SLAM questionnaire of Organizational Learning. The ECI questionnaire was completed by 33 leaders from various companies in the US and India, the SLAM questionnaire was completed and returned by 90 direct reports of these leaders. This section has been structured as follows:

1. Descriptive Statistics for the demographic information asked of the respondents
2. Descriptive Statistics and Correlational Statistics results to answer the research questions:
 - a) What is the relationship between a leader's emotional intelligence and organizational learning?
 - b) What aspects of leader's emotional intelligence impact organizational learning at the individual, team, and organizational levels?

Descriptive Statistics for Demographic information

Emotional Intelligence (responses from leaders). ECI V 2.0 tool of Emotional Intelligence was successfully completed and turned in by a total of 33 managers. Of these 33, approximately 51.5% managers were male and 48.4% were female. Leaders with a total experience of more than 15 years constituted the highest percentage of sample at 51.51% while 3.03% had an experience of less than a year, 12.12% had 1-4 years' experience, 24.24% had 5-10 years of experience.

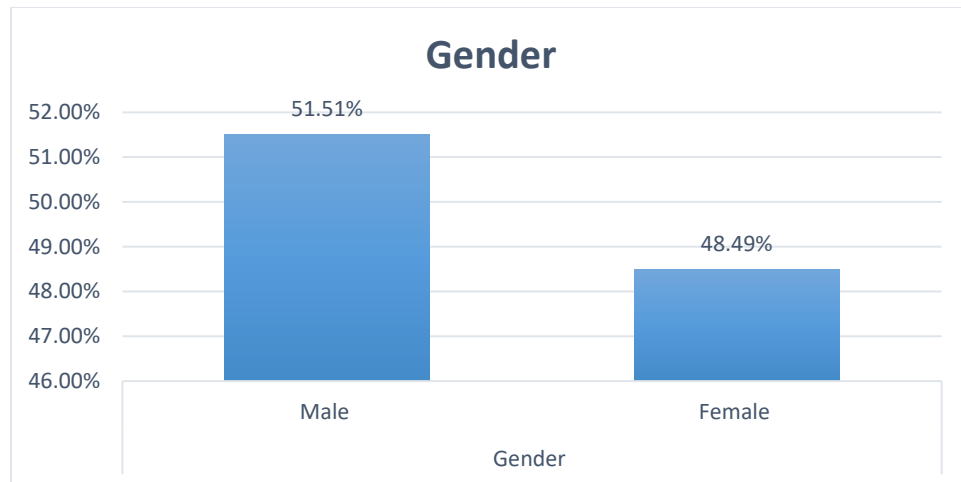


Figure 5. Emotional Intelligence responses by gender



Figure 6. Leadership experience (in years)

Conversely, with regards to the question of “years of experience in the current team”, the highest percentage of leaders had 1-4 years of experience, while the least percentage (9.10%) of leaders had more than 15 years of experience in working with their current teams. Those with less than 1 year of experience in their current teams constituted 12.12%, those with 5-10 years’ experience constituted 18.18%, and those with 11-15 years’ experience constituted 18.18% to the total sample.



Figure 7. Leaders' experience in the current team (in years)

Around 27% of leaders had a total of two direct reports, while leaders with three, four, or more than four direct reports constituted 24.24% of the total sample, each. 36.36% of leaders were between 50-59 years of age which was also the highest percentage group in the sample. 27.27% of them were between 40-49 years, 15.15% were between 30-39 years, 9.10% were between 20-29 years and 12.12% were more than 50 years of age.



Figure 8. Number of direct reports per leader

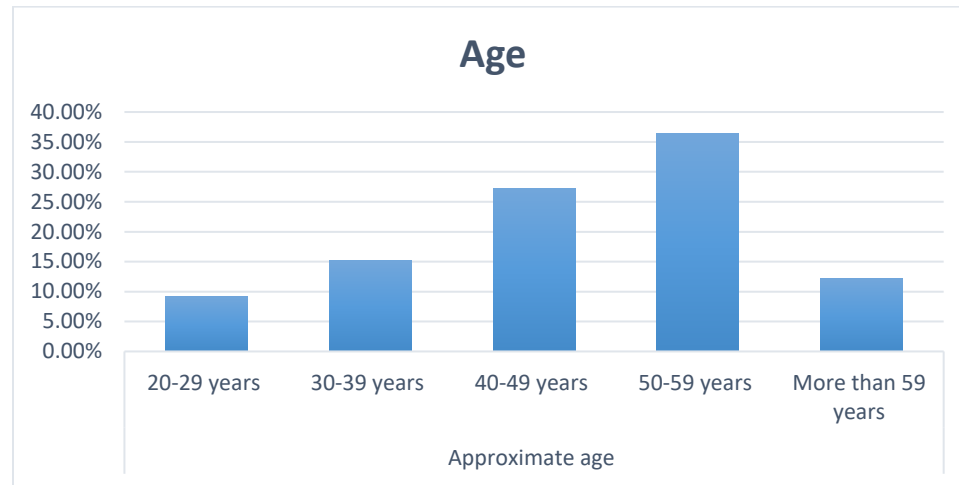


Figure 9. Average age of leaders

Approximately 48% of the respondents came from large size companies of more than 500 employees. Those from companies with 100-499 employees constituted 21.21% and those with 50-99 employees and less than 50 employees constituted 9.10% and 21.21%, respectively. A major proportion of our responses came from the Higher Education industry, with a total of 51.51% of responses. The second highest representation came from the Marketing and Government sectors with 9.10% and 9.09% of response, respectively. Both, the Technology and Professional Services sector made up 6.06% of the sample while Healthcare, Retail, Manufacturing, Financial Services and Non-Profit sector all constituted 3.03% of the sample.

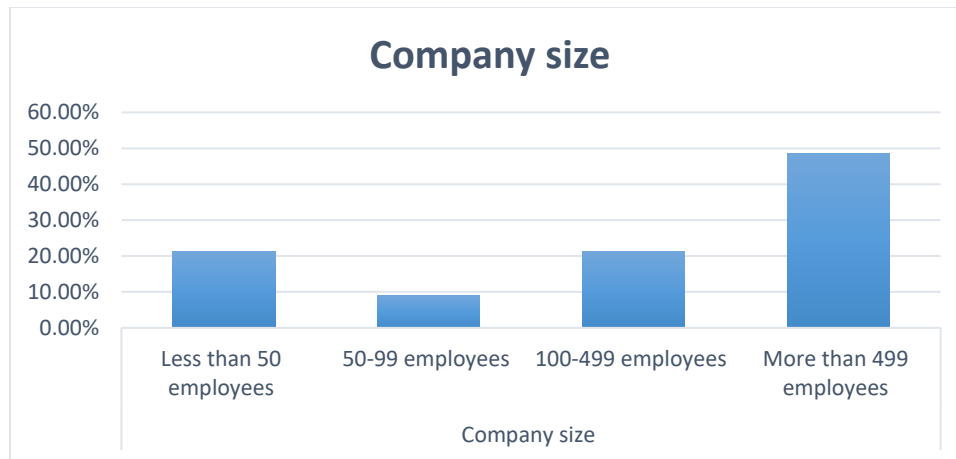


Figure 10. Company size (leader responses)

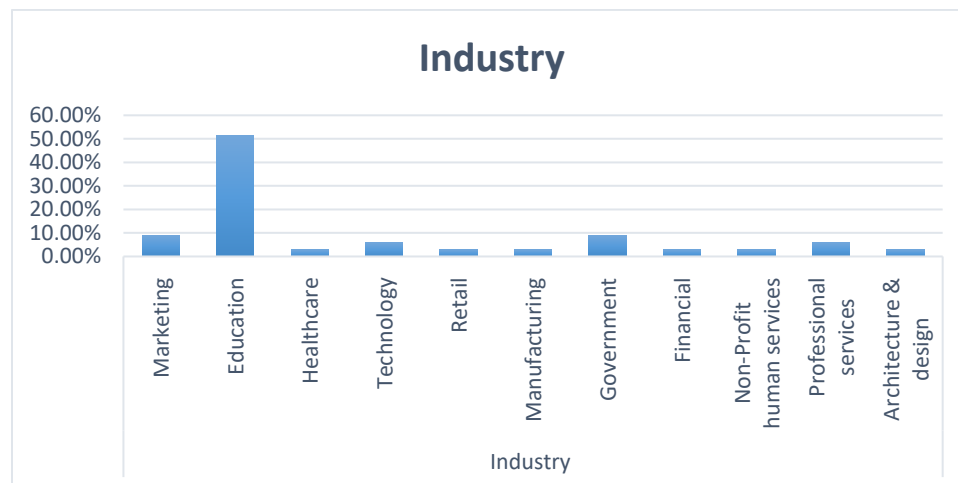


Figure 11. Type of Industry (leader responses)

Organizational Learning (responses from direct reports). The SLAM tool of Organizational Learning was completed by a total of 89 respondents, of which 64% were female and 36% were male. Leaders with a total experience of more than 15 years constituted the highest percentage of sample at 50% whereas the respondents with 5-10 years of experience constituted the second highest percentage of the sample at 23.33%. 14.44% of the direct reports surveyed had 1-4 years

of experience, 11.11% had experience between 11-15 years and 1.11% had only worked for less than a year.

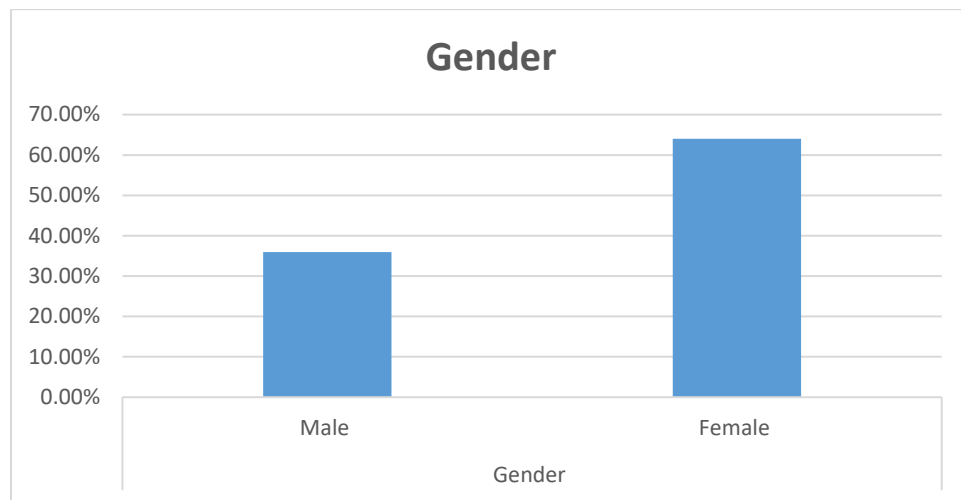


Figure 12. Organizational learning responses by gender



Figure 13. Team members' work experience (in years)

Majority of the respondents had 1-4 years of experience in their current team on an average and this section made up 48.88% of the entire sample. 22.22% of the direct reports had 5-10 years' experience of working within their team and 16.67% had worked for less than a year.

Those with 11-15 years' and more than 15 years' experience constituted 6.67% and 5.55% of the sample, respectively.



Figure 14. Team members' experience in the current team

Average age of the respondents was fairly distributed across three age groups – 30-39 years (26.96%), 40-49 years (26.96%), and 50-59 years (28%). 17.97% of the direct reports were between 20-29 years of age. In addition, the responses received from the direct reports regarding Industry and Company size were similar to those received from their leaders. Some variations in answer existed because both were open ended questions, therefore, there were no specific answer choices to choose from. For example, many respondents named their departments (finance, marketing etc.) in place of industry name.

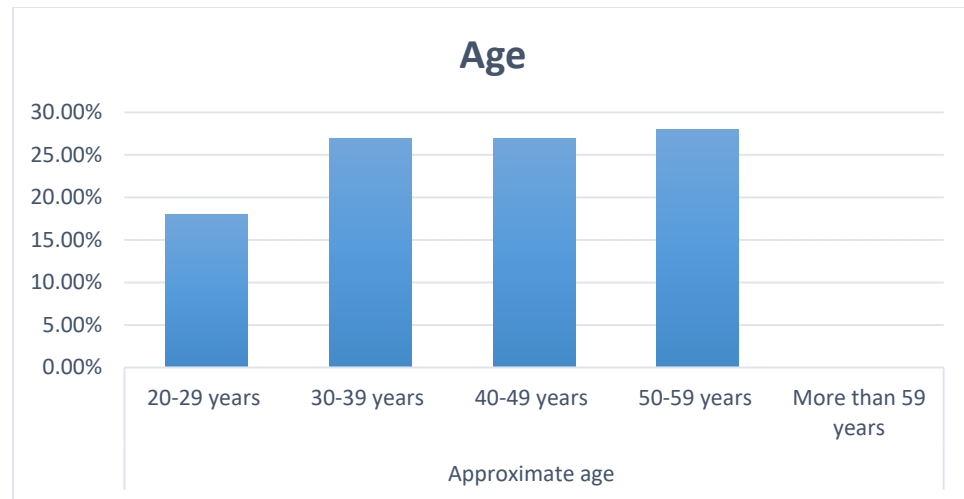


Figure 15. Average age of Team members

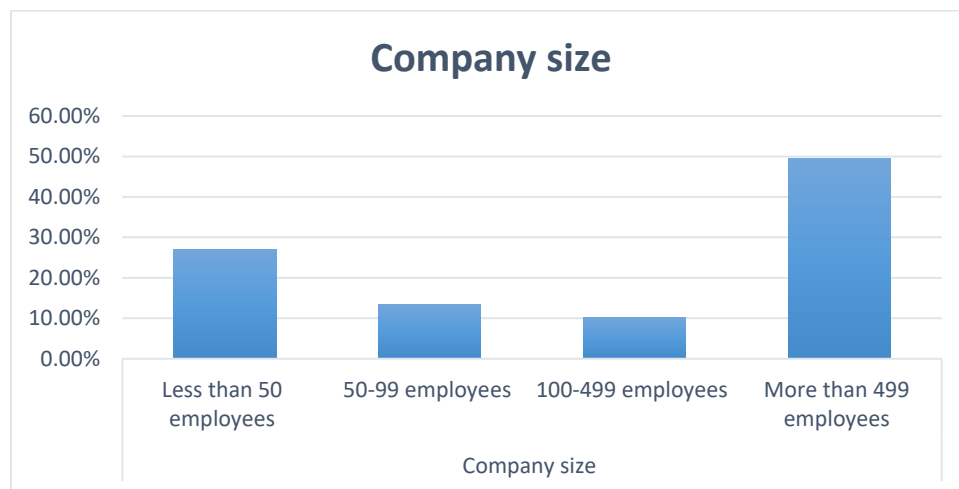


Figure 16. Company size (team members' responses)

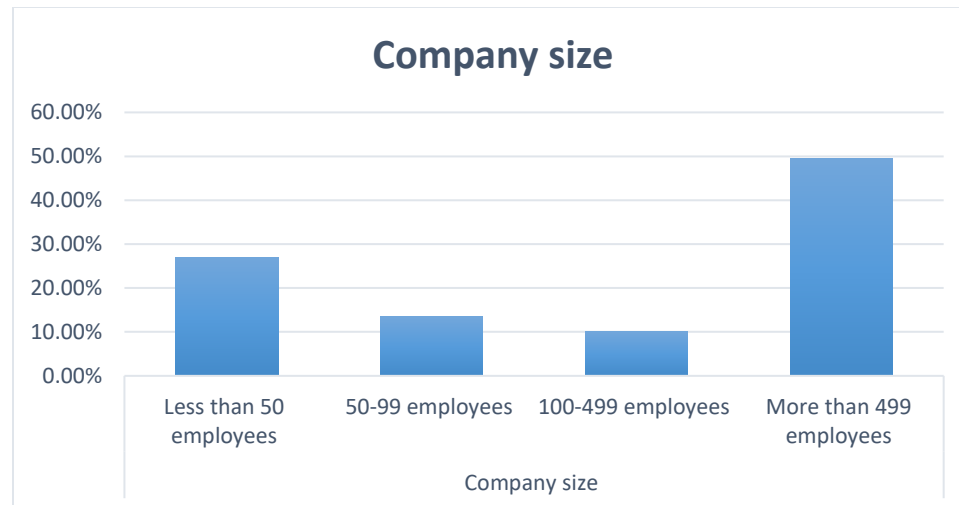


Figure 17. Company size (team members' responses)

Descriptive Statistics and Correlational Statistics

The mean and standard deviations obtained in this study were found to be consistent with those reported by the Hay Group (2005). We found the mean for the Self-awareness dimension of Emotional Intelligence of leaders to be 4.06 (compared to 4.0 as reported by the Hay Group, Inc.). Mean for Self-management was 3.9 which is the same as that reported for ECI V 2.0, mean for Social awareness was 4.11, again same as that reported for ECI and finally, we found the mean for Relationship management to be 3.9 (compared to 3.81 as reported by the Hay Group, Inc.). Standards deviations for all the four dimensions were found to be exactly the same as those reported by the Hay Group, Inc. (See figure 6.)

The descriptive statistics data for the organizational learning survey has also been summarized in Figure 6. The average mean for individual level learning stocks was found to be 3.9, mean for group level learning stocks was 3.7, and mean for organizational level learning stocks was 3.4. Standard deviation for the individual, group, and organizational level learning stocks was found to be 0.30, 0.42, and 0.61, respectively. Mean for feed-forward learning flows,

feed-back learning flows, and business performance was found to be 3.4, 3.7, and 3.8, respectively with a standard deviation of 0.42, 0.45, 0.51, respectively.

Table 3.

Mean and Standard deviations for the self-reported average scores of Emotional intelligence and Organizational learning

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
self_awareness	33	3.00	4.67	4.0654	.36785
self_management	33	3.21	4.42	3.9492	.29350
social_awareness	33	2.75	4.83	4.1110	.50506
relationship_management	33	2.79	4.79	3.9276	.42310
individual_level	33	3.30	4.60	3.9809	.30348
group_level	33	2.86	4.80	3.7942	.42953
organizational_level	33	2.30	4.64	3.4482	.61547
feed_forward	33	2.38	4.40	3.4073	.42755
feed_back	33	2.50	4.75	3.7697	.45077
business_performance	33	2.60	4.80	3.8021	.51282
Valid N (listwise)	33				

Hypothesis Testing

After completing the descriptive analysis of the results obtained from the two instruments – ECI and SLAM questionnaire, we now bring our attention to correlational statistics to analyze the hypothesis. Our objective for conducting a correlational analysis was to analyze if our proposed hypothesis was supported to answer our first research question:

a) What is the relationship between a leader's emotional intelligence and organizational learning?

The results from our correlational analysis will be analyzed both, in terms of the direction/strength of the correlation as well as its significance. Therefore, in addition to our four hypothesized relationships, we also propose two null hypothesis as follows:

H1(0): There is no significant correlation between a leader's emotional intelligence and the exploration process of organizational learning

H2(0): There is no significant correlation between a leader's emotional intelligence and exploitation process of organizational learning

We used the existing theories of organizational learning and emotional intelligence and analyzed indirect literature to establish a directional correlation (strong and positive) between the four learning sub-processes and the four emotional competencies of emotional intelligence. Based upon our correlational analysis, we found partial support for the proposed hypothesis.

See Table 4.

Table 4.

Correlations of Leader's Emotional Intelligence and the four sub-processes of Organizational Learning.

		Correlations									
		Individual_level	Group_level	Organizational_level	Feed_forward	Feed_back	Business_performance	Self_awareness	Self_management	Social_awareness	Relationship_management
Individual_level	Pearson Correlation	1	.400	.467	.513	.536	.543	.056	.062	-.108	-.134
	Sig. (2-tailed)		.021	.006	.002	.001	.001	.756	.732	.548	.458
	N	33	33	33	33	33	33	33	33	33	33
Group_level	Pearson Correlation	.400	1	.682	.660	.633	.540	-.122	.121	-.039	.173
	Sig. (2-tailed)	.021		.000	.000	.000	.001	.499	.503	.831	.336
	N	33	33	33	33	33	33	33	33	33	33
Organizational_level	Pearson Correlation	.467	.682	1	.768	.612	.698	-.044	-.029	-.170	.008
	Sig. (2-tailed)	.006	.000		.000	.000	.000	.808	.871	.346	.965
	N	33	33	33	33	33	33	33	33	33	33
Feed_forward	Pearson Correlation	.513	.660	.768	1	.775	.731	-.031	.003	.044	.075
	Sig. (2-tailed)	.002	.000	.000		.000	.000	.865	.985	.806	.677
	N	33	33	33	33	33	33	33	33	33	33
Feed_back	Pearson Correlation	.536	.633	.612	.775	1	.756	-.053	-.025	-.051	.097
	Sig. (2-tailed)	.001	.000	.000	.000		.000	.771	.889	.779	.590
	N	33	33	33	33	33	33	33	33	33	33
Business_performance	Pearson Correlation	.543	.540	.698	.731	.756	1	.175	.096	-.023	.202
	Sig. (2-tailed)	.001	.001	.000	.000	.000		.329	.596	.900	.259
	N	33	33	33	33	33	33	33	33	33	33
Self_awareness	Pearson Correlation	.056	-.122	-.044	-.031	-.053	.175	1	.747	.505	.638
	Sig. (2-tailed)	.756	.499	.808	.865	.771	.329		.000	.003	.000
	N	33	33	33	33	33	33	33	33	33	33
Self_management	Pearson Correlation	.062	.121	-.029	.003	-.025	.096	.747	1	.552	.604
	Sig. (2-tailed)	.732	.503	.871	.985	.889	.596	.000		.001	.000
	N	33	33	33	33	33	33	33	33	33	33
Social_awareness	Pearson Correlation	-.108	-.039	-.170	.044	-.051	-.023	.505	.552	1	.467
	Sig. (2-tailed)	.548	.831	.346	.806	.779	.900	.003	.001		.006
	N	33	33	33	33	33	33	33	33	33	33
Relationship_management	Pearson Correlation	-.134	.173	.008	.075	.097	.202	.638	.604	.467	1
	Sig. (2-tailed)	.458	.336	.965	.677	.590	.259	.000	.000	.006	
	N	33	33	33	33	33	33	33	33	33	33

*Sig (2 tailed) as shown in correlation matrix represents the p value.

H1: There is a strong positive correlation between leader's emotional intelligence and exploration process of organizational learning

H1(0): There is no significant correlation between a leader's emotional intelligence and the exploration process of organizational learning

Our correlational analysis partially supports the first hypothesis describing the relationship between leader's emotional intelligence and the process of exploration. For studying the process of exploration, which describes the flow of information from individual level to

group level and organization level, we analyzed correlations at the individual level (for intuition), individual and group level (for interpretation), group and organization level (for integration). The individual hypothesized relationships for the exploration process are as follows:

H1a: There is a strong positive correlation between social awareness and self management competencies of leader's emotional intelligence and intuition of ideas

Contrary to our proposed hypothesis, a negative weak relationship exists for social awareness of leaders' emotional intelligence with intuition of ideas among the subordinates. We found a negative ($r=-.108$), and significant ($p>.05$) correlation between the social awareness competency of leaders' emotional intelligence and individual level learning of subordinates, suggesting that both constructs are negatively correlated. On the other hand, the hypothesis concerning self management was supported; we found a positive but weak ($r=.062$), and significant ($p>.05$) correlation between the self management competency of leaders and employee learning at the individual level. However, since a value of 0.00 represents an absence of correlation, a value of .062 is not strong enough to suggest that this positive relationship between the two constructs is strong. But since, the results are significant, we can assume that the observed relationship (correlation) could have occurred because of sampling errors and no real correlation exists between leader's competency of self management and individual level intuition of ideas among subordinates.

H1b: There is a significant positive correlation between self awareness, self management, social awareness competencies of leader's emotional intelligence and interpretation of ideas

Interpretation of ideas takes place at two levels of analysis – individual and group level. While, at the individual level, we found a weak positive correlation ($r=.056$, $p>.05$) between self awareness of leaders and individual level interpretation of subordinates, the results did not

support our hypothesis for the same relationship at the group level. Negative, weak ($r=-.122$), and significant ($p>.05$) correlation was found between leaders' self awareness and group level interpretation among subordinates. With regards to the self management competency, it has a weak positive ($r=.062$, $p>.05$) correlation with individual level interpretation, a weak positive ($r=.121$) and significant ($p>.05$) correlation with group level interpretation. At the individual level, social awareness competency of leaders is found to have a negative weak ($r=-.108$) and significant ($p>.05$) correlation with individual level interpretation among subordinates, hence, this hypothesis was not supported. Similarly, correlation between leader's social awareness and team members' group level interpretation was also found to be weak negative ($r=-.039$) and significant ($p>.05$). Therefore, our results failed to support three of the hypothesized relationships - between self awareness of leaders and team's group interpretation of ideas, social awareness of leaders and interpretation of ideas both at the individual as well as group level. However, since the results are significant at the same time, we cannot confirm the positive relationship found with utmost certainty. In other words, there is a likelihood that the positive correlation is due to sampling errors. Nonetheless, the correlation is still very weak.

H1c: There is a significant positive correlation between self management, social awareness, relationship management competencies of leader's emotional intelligence and integration of ideas

To study the effect of leader's emotional competencies on the process of idea integration among the team members, self management, social awareness, and relationship management competencies were analyzed at the group as well as organizational level. Leader's self management was found to be positively correlated with group level integration of the team ($r=.121$, $p>.05$) but this correlation was weak; results were highly significant at a p level of .503.

However, at the organizational level, we found a negative weak ($p=-.029$) and significant ($p>.05$) correlation between self management competency of leaders and integration of ideas at the organization level. Social awareness of leaders has a negative weak ($r=-.039$) and significant ($p>.05$) correlation with group level integration of ideas among the team as well as a negative weak ($r=-.170$) and significant ($p>.05$) correlation with organization level integration. This means that leader's emotional competency of social awareness does not facilitate the idea integration process at all because it is negatively correlated at both levels of analysis. With regards to the relationship management competency of leaders, we found a positive weak ($r=.173$) and significant ($p>.05$) correlation with group level integration of ideas and positive weak ($r=.008$) and significant ($p>.05$) correlation with integration of ideas among the team at the organization level.

As opined by Bontis et al. (2012), organizational learning is a process of managing the tension between exploration of information and exploitation of knowledge. Exploration means exploring new information via feed-forward learning loops while exploitation means utilizing the knowledge that has already been created via feed-back loops (Crossan et al., 1999, Bontis et al., 2002, Berson et al., 2006). As a final test for our hypothesis, we calculated the correlation between the four emotional intelligence competencies of leaders (listed in hypothesis 1a through 1c) and feed-forward learning flows of organizational learning. Our results suggest that there was a negative weak ($r=-.031$) and significant ($p>.05$) correlation between leaders' self awareness and feed-forward learning flows. For self management competency of leader's emotional intelligence, we found a positive weak ($r=.003$) and significant correlation with feed-forward learning flows. Likewise, the correlation between social awareness competency of leaders and feed-forward learning flows was also positive but weak ($r=.044$) with a significant p value of

.806. Finally, the correlation between leader's relationship management competency and feed-forward learning flows was found to be positive, weak ($r=.075$) and significant ($p>.05$).

In analyzing these results, we find that our correlation analysis only partly supported hypothesis H1a, H1b and H1c and positive correlation was only confirmed for some of the emotional intelligence competencies of leaders. Therefore, the null hypothesis was not rejected. Since, all the results are significant, there may not be an actual positive correlation between leaders' emotional intelligence competencies and learning sub-processes as in the case of self management of leaders and individual level intuition among subordinates, self awareness of leaders and individual level interpretation among subordinates, self management of leaders and interpretation process (individual and group level), self management of leaders and group level integration of ideas among teams, relationship management competency of leaders and the integration process (group and organization level) and the observed r value of .062, .056, .121, .173, .008, respectively, may have only occurred due to the sampling errors. With regards to the feed-forward learning flows, all of the leaders' emotional intelligence competencies positively correlated with feed-forward learning flows except for self awareness. Thus, emotional intelligence generally was found to be positively correlated with the feed-forward learning loops, suggesting that three of the four competencies of leader's emotional intelligence facilitate forward flow of information from one level to another.

H2: There is a strong positive correlation between leader's emotional intelligence and exploitation process of organizational learning

H2(0): There is no significant correlation between a leader's emotional intelligence and the exploitation process of organizational learning

Our second main hypothesis (H2) was not confirmed and negative correlation was found between social awareness competency of leader's emotional intelligence and organization level institutionalization of knowledge.

H2a: There is a positive relationship between social awareness competency of leader's emotional intelligence and institutionalization of knowledge

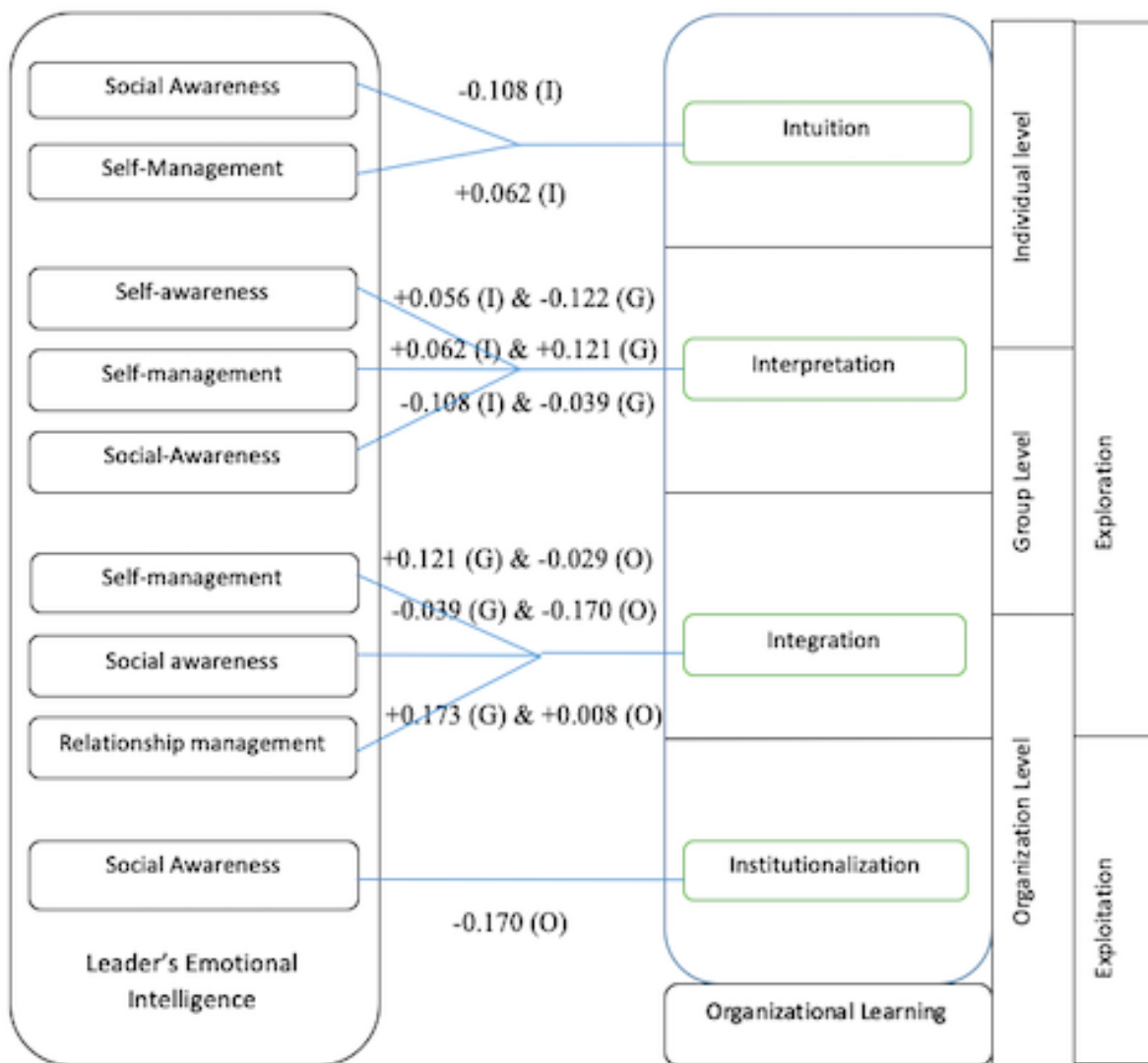
We found a negative weak ($r=-.170$) and significant ($p>.05$) correlation between social awareness of leaders and organization level institutionalization of knowledge. This result implies that greater degree of social awareness by the leader negatively affects the institutionalization of knowledge within organizational systems and processes. Hence, the findings are consistent with the existing literature on transactional leadership being more suitable for stable organizational environments in reinforcing existing practices (Berson et al., 2006; Vera & Crossan, 2004). We also wanted to see whether or not a leader's emotional intelligence facilitates feed-back flow of information so we analyzed the correlation between social awareness of leaders and feed-back learning flows and found a negative ($r=-.051$) correlation at the significance level of .779 ($p>.05$).

b) What aspects of leader's emotional intelligence impact organizational learning at the individual, team and organizational levels?

From our analysis, we found that employee learning at the individual level is facilitated by self awareness and self management competencies of leader's emotional intelligence; there is a correlation of .056 between self awareness of leaders and interpretation of ideas among subordinates and a correlation of .062 between self management of leaders and intuition of ideas among subordinates at the individual level. Leaders need to identify and control their own

emotions in order to help their team members successfully convert their intuitive ideas into meaningful information.

At the group level of analysis, self management of leaders facilitates group interpretation of ideas among the team as well as integration of information ($r=.121$) among the team members while relationship management positively correlates with group level integration of ideas among the team members at $r=.173$. To our surprise, we did not find any support for our second hypothesis and in fact, found a negative correlation between social awareness of leaders and organization level institutionalization of knowledge.



*(I) = Individual level; (G) = Group level; (O) = Organization level

Figure 18. Directional correlation between Leader's Emotional competencies and Organizational Learning sub-processes

Chapter 5. Discussion and implications

Discussion

Leader's Emotional Intelligence and Intuition sub-process: At the individual level, intuition of ideas among subordinates is facilitated by the leader's self management competency of emotional intelligence as found in our results. Antonakis (2003) states that, "individuals differ in the degree to which they learn from experience; some learn better from experience than others do, suggesting that not everyone obtains good tacit knowledge in equal amounts" (p. 360). Our initial argument was that depending upon the emotional support provided by the leader, employees can either learn from past mistakes or completely ignore past experiences, in which case they remain pessimistic about their future learning capabilities. An effective coaching by an emotionally intelligence leader at this stage, thus enables the employees develop strong commitment goals for future achievement (Jiang, 2009). In view of these statements, we proposed that leader's self management and social awareness competency will be most productive in helping employees remain receptive to new ideas. Our findings, however, revealed that social awareness by leaders is negatively correlated with individual level intuition among subordinates while self management by leaders is positively correlated.

Leader's Emotional Intelligence and Interpretation sub-process: At the team level, leader's emotional intelligence has a special significance in employee learning through collaboration and teamwork. Antonakis (2003) is of the view that leadership effectiveness largely depends on the personal view of the leader held by his subordinates. Therefore, if leaders are socially distanced from their subordinates, they cannot use individualized attention for employee learning. Perhaps, this is why we see a greater positive correlation between leader's emotional intelligence and individual level interpretation among subordinates compared to group level interpretation among

team members. Self awareness and self management capabilities together are utilized by the leader to facilitate idea interpretation at the individual level while only self management competency is needed to facilitate interpretation of ideas at the group level.

Leader's Emotional intelligence and Integration sub-process: Relationship management competency of leader's emotional intelligence enables integration of ideas at both team and organizational levels. This finding supports some of the previously held contentions about the role of leader's team motivation strategies in promoting a culture of knowledge sharing. In an empirical correlational study, Lu (2010) found a positive correlation between inspirational motivation and integration of ideas in the organizational learning process. Inspirational leadership is one of the competencies under relationship management construct of Goleman's mixed model of emotional intelligence (Wolff & Loman, 2007). Leaders use inspirational motivation to encourage explanation and sharing of words, actions, and ideas that were previously interpreted individually and in doing so, they "promote integration of the intuiting and interpreting forces through all levels of the learning organization" (Lu, 2010, p. 101).

Leader's Emotional Intelligence and Institutionalization sub-process: At the organizational level, negative correlation was found between leader's social awareness competency of emotional intelligence and institutionalization of knowledge into organizational systems, processes, and routines which is contrary to our proposed hypothesis. The finding is however, consistent with the view of Berson et al. (2006) who attributes institutionalization phase of organizational learning with senior level management because leaders at the mid or lower levels have little to no influence in developing systems and written policies. In fact, Antonakis (2003) posits that being immune to emotional nuances in others is especially useful for top level leaders

as they will be able to focus on the organizational mission and vision rather than getting distracted by emotional considerations for employee learning.

Therefore, we conclude that leader's emotional intelligence is not a facilitating factor in the institutionalization process at all. Perhaps, transactional leadership which has been found to be negatively correlated with emotional intelligence in many previous studies is more suitable for the institutionalization phase of organizational learning (Weinberger, 2009). Another possible explanation was given by Crossan et al. (1999) who state that changes in routine, systems, and structures occur more infrequently compared to the underlying process of intuition, interpretation, integration which are more fluid and continual. Therefore, any type of organizational change is considered as radical or transformational (Crossan et al., 1999). Since, the learning process and change does not occur more fluidly in the institutionalization phase, the role of leader's emotional intelligence gets considerably reduced. Moreover, there is always a gap between the point when new knowledge is developed and the point at which it is formalized within the systems, therefore, the focus of the organization once again shifts back to the individual and group level learning and initiative, requiring more frequent or sometimes continuous interjection by leaders at those levels (Crossan et al., 1999).

Limitations of the study

Although our study has produced some significant findings, there are certain limitations that must be acknowledged. Firstly, the sample used in the study was relatively small, thus inhibiting our ability to draw generalized conclusions about the results. The issue of generalizability is further exacerbated by the small size of leader-subordinate dyads as there were no more than five direct reports in any of the dyads included in the study. Such a significantly

small number of organizational learning responses cannot be expected to be truly representative of either leaders' emotional intelligence or the relationship between leader's emotional capability and organizational learning.

Secondly, self-reported measures were used for measuring leader's emotional intelligence and organizational learning and this may have induced some sort of bias by the respondents. Boyatzis, Golman and Hay Group (2002) cautions against the use of self-ratings from the ECI tool as a valid and reliable measurement for academic research purposes. According to the authors, the tool is not meant to be an all-comprehensive measurement of a leader's emotional competency but only a means of providing general developmental feedback to leaders. Similarly, self-reported measures for the organizational learning survey represents individual level learning from an employee's perspective only. In most cases, it is the leaders who are in a better position to comment on the learning capabilities of their subordinates. Therefore, the responses for individual level learning construct cannot be accepted on their face value for the purposes of this study.

A third limitation that must be addressed concerns the validity of the SLAM instrument of organizational learning. Since, the tool has not yet been evaluated in empirical studies, we find it difficult to trust its ability in accurately assessing organizational learning, especially in a correlation study. With regards to the utility of the tool, Bontis et al. (2002) state that "the measurement items can realistically be thought of as only proxies for an underlying, latent phenomenon that is itself not fully measurable" (p. 459). Therefore, we certainly expect future research initiatives that incorporate SLAM model instrument for measuring organizational learning in similar non-experimental studies.

Implications for HRD

Our study has major implications for Training and Development, Organizational Development, and HRD professionals. The results of this study provide a credible support to the belief that emotional intelligence is a critical leadership component and must be incorporated into decision-making related with leadership hiring practices, coaching programs, and soft-skills training interventions for leaders. Since, self awareness, self management, and relationship management are the only emotional intelligence competencies that facilitate the sub-processes of organizational learning, emotional intelligence training interventions in the workplace should specifically focus on enhancing these skills across the leadership workforce.

Opengart (2005) contends that the field of Human Resource Development has a significant role in helping leaders develop emotional intelligence competencies. In learning organizations, leaders are responsible for developing employees' cognitive intelligence capabilities and knowledge about their work contexts. Therefore, most often, employee performance largely depends upon employees' own perceptions of a leader's emotional intelligence and how the leader manifests these emotional competencies while leading a team. Leaders who are good at recognizing emotions in themselves and others, can provide need-based coaching and mentoring to help guide the efforts of their team members. This mentoring can be in the form of on-the-job performance support or career development initiatives.

As per our findings, not only does emotional management in self and others (relationship management) benefit interpretation of ideas at the group level, it also facilitates integration of knowledge among team members, offering opportunities for collaboration and teamwork. It is at the team level, that individual ideas convert into knowledge which then gets embedded within the organizational environment to facilitate future learning. Therefore, Knowledge based

organizations can benefit greatly from self management and relationship management competencies of leaders. This is because knowledge based firms have a flatter structure that requires high level of interaction and influx of ideas between leaders and employees, thereby, requiring high emotional intelligence to ensure continuous learning (Hess & Bacigalupo, 2010). Most organizations fail to manage effectively the emotional currents that take place during times of uncertainty and because learning must continue during these times, role of leaders in the process becomes even more critical. Hence, with a clear understanding of how self and social management competencies of leaders can help team members engage in ideas and develop new meaningful knowledge, organizations will have better chances of attaining the status of a “learning organization”.

Implications for Theory

This study was an attempt to fill the existing gap in literature by proposing and testing a theoretical framework to study the relationship between leader’s emotional intelligence and organizational learning at three different levels of analysis – individual, team, and organization. Many empirical studies have been conducted in the past that affirms the importance of leader’s emotional intelligence in various organizational contexts. Not all of them, however, yielded positive results (Weinberger, 2002). According to Antonakis (2003), there are both conceptualization and measurement issues with regards to emotional intelligence and a lack of evidence about specific EI domains forces one to doubt its importance altogether. However, in our study, rather than questioning the utility of the emotional intelligence construct in general, we were more interested in understanding the function of leader’s self and social emotional competencies in the organizational learning process. Berson et al. (2006) suggests that the link

between leadership theories and exploitation of knowledge is less developed than for exploration. We explored this connection in detail using leader's emotional intelligence theory. And, in doing so, we have opened further areas of investigation to test this relationship empirically.

In our study, self awareness, self management, and relationship management competencies of leader's emotional intelligence were found to be positively related to individual and group level learning among the subordinates. There is a possibility that the weak positive relationship found in our analysis was not able to fully explain the connection between the two variables. Perhaps, in order to reach more credible conclusions, mediation and moderation studies could be initiated as the observed relationship may be more indirect rather than direct. For example, high or low degree of leader-subordinate trust or the strength of leader-subordinate dyad may serve as potential moderators while explaining the relationship between leader's emotional competencies and employee learning at the individual and team levels. Furthermore, organizational context, such as HR practices or environmental uncertainty could be potential mediating forces at the organizational level which means that if the context is removed, there may be no need for leaders to practice high emotional intelligence at all. Future researchers can explore these possibilities.

Recommendations for future

Our future recommendations and suggestions are divided into three categories: replication of the study, research methodology, and instrumentation. We explain each of these recommendations in further detail in the following paragraphs.

Our study has an immense scope for further investigation in different organizational contexts and industrial settings. Since, we incorporated a small sample size, majority of which represented the academic (higher education) sector, we caution our readers against any generalization of our findings. Future researchers should use the ECI v 2.0 tool and SLAM model instrument to replicate this study in a multitude of industries, such as government, financial, manufacturing to improve the generalization of results. Moreover, the leader-subordinate dyads included in this study had small number of subordinates which may have limited the accuracy in measuring leader's emotional intelligence. Future studies should consider using large teams (with at least 15 subordinates) to increase the reliability of findings.

Empirical investigation could further shed light on the relationship between leader's emotional intelligence and organizational learning. This could be achieved via quantitative and qualitative studies. Quantitative studies might enable us to understand whether or not a strong correlation actually exists between the two variables or whether there is a direct or indirect relationship. On the other hand, qualitative studies could help us peel off layers of this connection to explain how leaders use each of their emotional competencies in real-time scenarios to facilitate learning in individuals and teams. In a commentary on the work of Prati et al. 2003, Antonakis (2003) suggests that there is indeed a dearth of empirical findings in scholarly literature concerning the effectiveness of leader's emotional intelligence after controlling the variables of personality and general intelligence. This implies that the positive correlation between emotional intelligence of leaders and organizational learning found in this study could very well be the outcome of personality traits and general intelligence of leaders. Therefore, in order to further comment upon the findings of our study, we need similar future investigations, especially those with mediation and moderation relationships.

The results in this study are not significant enough to suggest a direct positive correlation between leader's emotional intelligence and organizational learning and therefore highlights the possibility of an indirect effect via mediating or moderating variables. The emotional intelligence constructs, for which a positive weak correlation has been found in our findings, we would recommend conducting moderation studies to see if there are any independent variables such as trust, motivation level of employees, or environmental context that increases the level of emotional intelligence in leaders to facilitate improved employee learning outcomes at different levels of analysis.

Finally, we recommend using instruments other than those used in this study to measure emotional intelligence and organizational learning. Because, no past study has used the SLAM model instrument for organizational learning, the findings from this tool cannot be accepted in full confidence. Hence, we suggest using a different tool that also analyses organizational learning as a process rather than an outcome. Similarly, other emotional intelligence tools, such as, MSCEIT, EQi, ESCQ tool could be used.

Conclusion

This study examined existing research on the relationship between emotional intelligence of the leader and learning that occurs in organizations and proposed a theoretical framework based upon our review of indirect literature. We did this by focusing on the individual components proposed in Goleman's mixed model of emotional intelligence and the four I's of learning identified in the 4I framework of organizational learning. We then tested this framework on a sample of 33 leader-subordinate dyads from India and US by carrying out correlation analysis to support/reject the four proposed hypothesis and two null hypothesis.

Our findings suggest that the influence of emotional intelligence in general, seems to be much stronger in the idea integration stage because self management and relationship management by leaders help in integration of ideas at team and organizational levels. This indicates the critical role played by a leader's emotional competencies in combining individual ideas into integrated knowledge through group efforts. On the contrary, social awareness of the leader was not found to be a facilitating factor in any of the learning sub-processes. This is an interesting finding because past researchers have established the role played by social awareness of leaders in various organizational outcomes including, promotion of subordinate engagement in a group of millennials (Crandell, 2015), using empathy to enable employees see changes and opportunities (Leung, 2005), and identifying verbal and non-verbal cues to understand employees' perspectives (Phipps, Prieto, Ndinguri, 2014).

Learning in organizations is one of the pillars of Human Resource Development (Lien, Hung, & McLean, 2007; Popova-Nowak & Cseh, 2015; Watkins & Kim, 2018). There is no dearth of literature on organizational learning and its antecedents in the scholarly literature. However, there has been relatively less consideration on the antecedents from an emotional intelligence perspective in these studies. Our study may encourage researchers to consider the role of emotional intelligence of the leader in such a relationship and add a new dimension to existing knowledge on organizational learning and its antecedents.

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9843(03)00051-1

Appendix

Appendix A: Invitation Email

ROCHESTER INSTITUTE OF TECHNOLOGY

THESIS TITLE: ROLE OF LEADER'S EMOTIONAL INTELLIGENCE IN
ORGANIZATIONAL LEARNING: A QUANTITATIVE STUDY

INVITATION EMAIL

SUBJECT: Request for participation in a Graduate thesis study

Dear --

I am a graduate student in the MS Human Resource Development program at the Rochester Institute of Technology, New York. As a part of the requirement for the graduate program, I am required to complete a thesis based on a research project. I am seeking potential sites to conduct my research. I will appreciate if you could permit me to collect some data for my research in your organization.

The objective of the research is to examine if and how a leader's emotional intelligence influences the learning of the team members. I need to collect data for this study from leaders and their teams. The online survey should not take more than 20 minutes to complete. The survey will not ask for the participant's name or any other identifying details.

This study will be conducted only after a proper approval from RIT has been obtained. If your permission is granted, the information collected will be kept confidential and utmost care will be taken to protect the identity of the organization and the participants. The data I collect will be used purely for academic purposes.

If you have any questions, please feel free to contact me or my thesis advisor Dr. Malar Hirudayaraj at malar.h.raj@rit.edu

Regards,
Navjot Kaur

Appendix B: Informed Consent Form

ROLE OF LEADER'S EMOTIONAL INTELLIGENCE IN ORGANIZATIONAL LEARNING: A QUANTITATIVE ANALYSIS

Please read this consent document carefully before you decide to participate in this study.

Purpose of the research study: *We are seeking your participation in a graduate thesis conducted at the Rochester Institute of Technology, New York. The purpose of the study is to find out if there is a relationship between a leader's emotional intelligence and learning that takes place among the team members. From the perspective of leaders, this study is interested in understanding their emotional intelligence skills and whether they play any role in facilitating learning among the team members. From the team members' perspective, the study is interested in knowing about their learning capabilities at the individual, team and organizational level.*

What you will be asked to do in the study: *You will be asked to answer some questions about yourself and your work.*

Time required: *The online survey will take approximately 20-30 minutes to complete.*

Risks of the study: *Although there are no major risks involved in the study, some participants may find it distressing to give sensitive and personal information since this information asks for their emotional intelligence skills or learning behaviors. However, if you find yourself uncomfortable answering any questions you may stop the study at any time. You can also choose not to answer any specific questions that you feel uncomfortable with. There will no negative consequences for doing so.*

Benefits of the study: *There are no direct benefits or incentives offered to the participants for participating in the study. The results will contribute to the existing knowledge about leader emotional intelligence and employee learning. If significant results are found, the study will help organizations in planning various leadership development and employee learning interventions, with a particular significance for "Learning Organizations".*

Incentive or Compensation: *There is no incentive for participating; therefore, you will not be adversely affected in any way if you choose not to participate.*

Confidentiality: *Information about you and your organization will be kept anonymous*

throughout the process and after the study is over. The survey does not ask for any identifying information, therefore your responses to the survey questions will be reported anonymously. The collected data will be stored in a password secured file in the researcher's personal computer device. Once the data has been analyzed, this file will be destroyed and the identity of the organization will not be revealed anywhere in the thesis manuscript or publication.

Voluntary participation: *Your participation in this study is completely voluntary. Should you elect to discontinue participation, any information already collected will be discarded. There is no penalty or loss of benefit for choosing not to participate.*

Right to withdraw from the study: *You have the right to withdraw from the study at any time without consequence or penalty.*

Whom to contact: *If you have any questions relating to your rights as a participant, any complaints about the study and any problems that are encountered during the survey, please contact the student researcher, Navjot Kaur at nl9536@rit.edu or the faculty thesis advisor, Dr. Malarvizhi Hirudayaraj at malar.h.raj@rit.edu*

I have read the above description about the “Role of Leader’s Emotional Intelligence in Organizational Learning: A Quantitative Analysis” study and have understood the terms and conditions for participation. By clicking “yes” below, I agree that I am aware of what is being asked of me and I agree to participate at my own free will.

Yes _____

No _____

Appendix C: Request for the use of SLAM Instrument

● Navjot Kaur LNU (RIT Student)

October 14, 2019 at 12:49 PM

NL

Requesting permission to use SLAM survey tool

To: mcrossan@ivey.uwo.ca,

Reply-To: nl9536@rit.edu

Dear Professor Crossan,

My name is Navjot Kaur and I am a graduate student in the MS Human Resource Development program at the Rochester Institute of Technology, New York. I am fascinated by your work in the field of Organizational learning and wish to study the 4I Framework for my graduate thesis.

My purpose of writing to you is to seek your permission to use the sample version of Strategic Learning Assessment Map (SLAM) survey tool for my study.

My thesis is titled "Role of Leader Emotional Intelligence in Organizational Learning: A study of the 4I Framework" and aims at examining the role leaders play in facilitating learning in their team members. I wish to use SLAM as a data collection survey tool which will be filled by employees as a self-report measure of their learning capabilities.

If your permission is granted, I promise to abide by the rules governing appropriate use and referencing of the tool in the thesis paper.

If you have any further questions, please feel free to contact me. Thank you in advance for your time and consideration.

Regards,
Navjot Kaur

Appendix D: Approval for the use of SLAM Instrument

● Crossan, Mary

October 15, 2019 at 10:55 AM

MC

RE: Requesting permission to use SLAM survey tool

To: nl9536@rit.edu

Yes, I am fine with that. You might also be interested in these two draft articles. One that focuses on the link between leader character and OL, and the other that describes the anatomy of leader character. There are other published articles on leader character, but these ones are in the early stages and therefore not available quite yet.

Mary

From: Navjot Kaur LNU (RIT Student) <nl9536@rit.edu>

Sent: Monday, October 14, 2019 12:50 PM

To: Crossan, Mary <mcrossan@ivey.ca>

Subject: Requesting permission to use SLAM survey tool

Dear Professor Crossan,

My name is Navjot Kaur and I am a graduate student in the MS Human Resource Development program at the Rochester Institute of Technology, New York. I am fascinated by your work in the field of Organizational learning and wish to study the 4I Framework for my graduate thesis.

My purpose of writing to you is to seek your permission to use the sample version of Strategic Learning Assessment Map (SLAM) survey tool for my study.

My thesis is titled "Role of Leader Emotional Intelligence in Organizational Learning: A study of the 4I Framework" and aims at examining the role leaders play in facilitating learning in their team members. I wish to use SLAM as a data collection survey tool which will be filled by employees as a self-report measure of their learning capabilities.

If your permission is granted, I promise to abide by the rules governing appropriate use and referencing of the tool in the thesis paper.

If you have any further questions, please feel free to contact me. Thank you in advance for your time and consideration.

Regards,
Navjot Kaur



Character
Infused...1.docx



Anatomy of
Leader...8.docx

Appendix E: Emotional Intelligence Survey

EMOTIONAL INTELLIGENCE SURVEY

Gender:

Years of work experience leading others:

Years of experience in the current team:

No of direct reports:

Approx. age:

Company size:

Industry:

Self-Awareness Cluster	Never	Rarely	Sometimes	Very Often	Always
Emotional Self Awareness					
I am aware of my own feelings					
I recognize the situations that arouse strong emotions in me					
I know how my feelings affect my actions					
I reflect on underlying reasons for my feelings					
Accurate Self Assessment					
I acknowledge my own strengths and weaknesses					
I am defensive when receiving feedback					
I have a sense of humor about myself					
I look for feedback, even when hard to hear					
Self Confidence					
I believe myself to be capable for a job					
I doubt my own abilities					
I present myself in an assured manner					
I have a “presence”					
Self-Management Cluster	Never	Rarely	Sometimes	Very Often	Always
Emotional Self Control					
I act impulsively					
I get impatient or show frustration					
I behave calmly in stressful situations					
I stay composed and positive, even in trying moments					
Transparency					
I keep my promises					
I bring up ethical concerns					

I acknowledge mistakes					
I act on my values even when there is a personal cost					
Adaptability					
I adapt ideas based on new information					
I apply standard procedures flexibly					
I handle unexpected demands well					
I change the overall strategy, goals, or projects to fit the situation					
Achievement					
I seek ways to improve performance					
I set measurable and challenging goals					
I anticipate challenges to a goal					
I take calculated risk to reach a goal					
Initiative					
I hesitate to act on opportunities					
I seek information in unusual ways					
I cut through red tape and bend rules when necessary					
I initiate actions to create possibilities					
Optimism					
I have mainly positive expectations					
I believe that the future will be better than the past					
I stay positive despite setbacks					
I learn from setbacks					
Social Awareness Cluster	Never	Rarely	Sometimes	Very Often	Always
Empathy					
I listen attentively					
I am attentive to peoples' moods or nonverbal cues					
I relate well to people with diverse backgrounds					
I can see things from someone else's perspective					
Organizational Awareness					
I understand informal structure in the organization					
I understand the organization's unspoken rules					
I am not politically savvy at work					
I understand historical reasons for organizational issues					
Service Orientation					
I make myself available to customers or clients					
I monitor customer or client satisfaction					

I take personal responsibility for meeting customer needs					
I match customer or client needs to services or products					
Relationship Management Cluster	Never	Rarely	Sometimes	Very Often	Always
Developing others					
I recognize specific strengths of others					
I give directions or demonstrations to develop someone					
I give constructive feedback					
I provide ongoing mentoring or coaching					
Inspirational Leadership					
I lead by example					
I make work exciting					
I inspire people					
I articulate a compelling vision					
Change Catalyst					
I state need for change					
I am reluctant to change or to make changes					
I personally lead change initiatives					
I advocate change despite opposition					
Influence					
I engage an audience when presenting					
I persuade by appealing to peoples' self-interest					
I get support from key people					
I develop behind-the-scene support					
Conflict Management					
I air disagreements or conflicts					
I publicly state everyone's position to those involved in a conflict					
I avoid conflicts					
In a conflict, I find a position everyone can endorse					
Teamwork and Collaboration					
I do not cooperate with others					
I solicit others' input					
In a group, I encourage others' participation					
I establish and maintain close relationships at work					

Appendix F: Organizational Learning Survey

ORGANIZATIONAL LEARNING SURVEY

Gender:

Years of work experience:

Years of experience in the current team:

Approx. age:

Company size:

Industry:

Individual level learning stocks	Never	Rarely	Sometimes	Very Often	Always
I am able to break out of traditional mind-set to see things in a new and different way.					
I feel a sense of pride in my work					
I have a clear sense of direction in my work					
I am aware of the critical issues that affect my work					
I generate many new insights					
Group level learning stocks					
We have effective conflict resolution when working in groups					
Different points of view are encouraged in group work					
Groups are prepared to rethink decisions when presented with new information					
In meetings, we seek to understand everyone's point of view					
Groups have the right people involved in addressing the issues					
Organizational level learning stocks	Never	Rarely	Sometimes	Very Often	Always
We have a strategy that positions us well for the future					
The organizational structure supports our strategic direction					
The organizational culture can be characterized as innovative					
The organizational structure allows up to work effectively					
Our operational procedures allow us to work efficiently					
Feed-forward learning flows	Never	Rarely	Sometimes	Very Often	Always

Lessons learned by one group are actively shared with others					
Individuals have input into the organization's strategy					
Results from the group are used to improve products, services and processes					
Recommendations by groups are adopted by the organization					
We do not "reinvent the wheel"					
Feed-back learning flows	Never	Rarely	Sometimes	Very Often	Always
Policies and procedures aid individual work					
Company goals are communicated throughout the organization					
Company files and databases provide the necessary information to do our work					
Group decisions are supported by individuals					
Business Performance	Never	Rarely	Sometimes	Very Often	Always
Our organization is successful					
Our group meets its performance targets					
Individuals are generally happy working here					
Our organization meets its clients'/customers needs					
Our organization's future performance is secure					