

UNIVERSITY OF OTTAWA

**Can Leaders Influence a Learning Organization? An Exploratory Study of the
Relationship between Leadership, Organizational Learning Capability and the
Mediating Role of Trust**

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the requirements for the Master of Science in Management degree

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University of Ottawa

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M.Sc. Management Candidate

Thesis Supervisor: Prof. Swee C. Goh

DEDICATION

I lovingly dedicate this thesis to my family and close friends. I will always appreciate the abundant support and encouragement you showed me during the pursuit of this Master's degree.

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ABSTRACT

The purpose of this research is to study how organizations maintain their competitive advantage in today's turbulent and highly competitive business environment, by striving to become a learning organization. The impact of factors such as leadership (both transformational and transactional leadership) and trust on an organization's learning capability is empirically examined. This research adds to the existing body of literature in two ways. First, it argues that a transactional leadership style can influence learning, despite research spanning the last decade that has focused on transformational leadership theory as the dominant model of effective leadership. Therefore, the importance of both leadership styles, each having valuable differential effects is emphasized in this study. Second, the previously untested role of trust as mediating the relationship between leadership and organizational learning capability is examined. It is argued that without supervisor trust, the opportunities for a learning organization to reach its full potential and to subsequently develop learning capabilities is reduced. Findings from this study support the influence of both leadership styles on learning. Trust in one's supervisor was also found to fully mediate the relationship between leadership and learning.

1. STATEMENT OF THE PROBLEM

Several studies have emphasized the role of the leader in contributing to an effective organization (Senge 1990; Lei et al 1999; Prewitt 2003; Lloresn et al 2005). This is particularly important given the turbulent business environments that organizations face today and their need to be adaptable and sustain a competitive advantage. One-way to gain such an advantage is through the creation of a learning organization and the resultant development of its learning capabilities (De Geus 1988). Through continuous learning, organizations are better able to remain adaptive and flexible and more able to respond to changes in the environment (Burke et al 2007).

Though the link between leadership and learning has been studied in the literature most of the research spanning over the last decade has focused on transformational leadership theory as the dominant model of effective leadership (House & Shamir 1993) and largely discounted transactional leadership as important to learning. This thesis makes unique contributions by first arguing that a transactional leadership style can influence learning and then by studying the differential effects that both leadership styles have on learning.

The role of trust in facilitating learning has also been given limited if any attention in the literature. Trust allows for knowledge and opinions to be shared openly without fear of punishment or reprisal (Pillai et al 1999; Gillespie; Mann 2000). The use of defensive mechanisms and routines according to Argyris (1996) stems from a lack of trust. This limits learning by creating barriers towards knowledge generation and transfer and as a result, constrains an organization's learning capability and subsequent competitive advantage. Therefore, the second contribution of this thesis is to argue for the mediating role of trust between both leadership styles, transformational and transactional, and learning.

The objective of this thesis then is to study how a learning organization and learning capabilities are influenced by a leader. For learning to occur, it is also argued that trust is crucial. Trust can be fostered by a leader and can consequently contribute to building an organization's learning capabilities as well. This thesis makes unique contributions not only

by examining the role that trust plays in learning but also by looking at how both transformational and transactional leaders facilitate learning and engender trust.

In order to provide some background to the key areas of study, a review of the literature on learning organizations and learning capabilities will first be provided; this is followed by a review of leadership and finally trust. The next section provides a broad overview of the learning organization literature, its different conceptualizations and a description of the concept of organizational learning capability.

2. LITERATURE REVIEW

In this section, overviews of the learning organization literature will first be provided, followed by the literature on leadership and finally trust.

2.1 The Learning Organization

Organizations today face turbulent and constantly changing business environments as a result of increased globalization, the changing nature of work and a continually diversifying workforce to name a few factors (Mayer et al 2005). As a result, there is an increasing need for them to use resources efficiently and to be adaptable in order to maintain a sustained competitive advantage. The literature suggests that a learning organization is one way for a company to gain such an advantage in these environments (DeGeus 1988). A learning organization is one that makes continuous learning a priority. This makes such organizations important to study because those organizations that fail to learn will inevitably disappear (Nevis, DiBella & Gold 1995). Learning organizations are superior to their competitors, and are thus able to maintain a competitive advantage (Appelbaum & Gallagher 2000), because they are constantly scanning the environment looking for ways to adapt to the external environment as well as anticipate the need for future change. Essentially, they are open to constantly reviewing their approaches to doing business and make changes as needed. As a result, learning organizations tend to be envied by their competitors (De Geus 1988; Leonard-Barton 1992; McGill et al 1993). Simply then, continuous learning and the ability to develop new knowledge are at the forefront for a learning organization to develop its competitive advantage (Nonaka 1994; Prusak 1997 & Simonin 1997). Practical examples of learning organizations in today's business environment include companies like: Walmart, Honda, General Electric and 3M to name a few. Examples of non-learning organizations would most obviously include departments in the federal and provincial governments that are hampered by bureaucratic "red tape" and rigid organizational hierarchies.

Learning organizations according to Calantone et al (2002) can also be linked to positive outcomes such as increased firm performance and innovativeness. Therefore, it can be argued that such firms drive the market rather than be driven by it. This positive relationship between an organization's learning capability and performance is further

supported by Baker & Sinkula 1999; Zhang et al 2004; Pérez López et al 2005; Prieto & Revilla 2006 and López-Sánchez et al 2010. In a longitudinal study by Goh and Ryan (2008) learning organizations were also found to outperform their competitors with stronger financial performance over time when examining accounting measures such as return on equity, return on asset, profit margins and growth in earnings and cash flow. Findings by Yeo (2003) also posit that learning organizations achieve better financial performance and increased knowledge creation and innovation. Alegre & Chiva (2007) also underline through an empirical study, the importance that learning has for an organization's innovative performance. Still other literature on learning organizations has shown them to outperform their competitors when non-financial metrics are used as well. Learning organizations have been found to encourage more experimentation than their competition, leading to more new products and services being brought to market, greater customer satisfaction, more suggestions being implemented, more investment into innovation as well as a larger number of employees with new skills (Ellinger et al 2002; Prieto & Revilla 2006). Findings by Goh and Ryan (2002) and Rose et al (2009) also found a positive relationship between an organization's learning capability and employee job satisfaction. Likewise, Chiva & Alegre (2008) not only provide support for the relationship between an organization's learning capability and job satisfaction but with emotional intelligence as well. As a result, for all these reasons, learning organizations are capable of adapting to change and do so better than their competition, therefore ensuring their survival.

In the following sections, various conceptualizations of a learning organization that are in line with the focus of this thesis are discussed. In addition, important distinctions between the learning organization and organizational learning are also made.

2.1.1 Conceptualizations of a learning organization. This thesis takes a practices approach to learning and therefore views it as a continual cycle of knowledge creation, experimentation and sharing. Supporting this approach, Garvin (1993) conceptualizes a learning organization as one that is skilled at creating, acquiring, and transferring knowledge as well as modifying its behaviour to reflect new knowledge. This is similar to Fiol and Lyles's (1985) conceptualization, which suggests that it is a process of improving organizational actions through better knowledge and understanding. Likewise, Crossan et al

(1999) describe it as the process of change in thoughts and actions, individual and shared, embedded in and affected by the institutions of the organization. In opposition to this practices approach, there are others that view learning from a processes perspective and perceive it as merely an opportunity for training and educating the workforce (Ellström et al 2008).

In addition to the practices approach to learning, a learning organization more specifically refers to a particular type of organization with certain characteristics. It is one that “purposefully adopts structures and strategies to encourage learning” (Dodgson 1993, p. 2). This is thought to differ conceptually from organizational learning, which is an internal capability, a process that can take place in any organization. Most of the literature on these two concepts views them as separate though related ideas. Generally, descriptions of a learning organization are prescriptive as they target practitioners and tend to refer to organizations that have “displayed continuous learning and adaptive characteristics, or have worked to instill them” (Yang et al 2004, p. 34). Descriptions of organizational learning on the other hand are descriptive as they target academics “and denote collective learning experiences used to acquire knowledge and develop skills (Yang et al 2004, p. 34). However, Gorelick (2005) argues that both conceptualizations are needed as they work together. She perceives learning organizations as “providing the tools and methods that are applicable and useful for organizational learning” (p. 384). Therefore, to Gorelick, a learning organization is one that is capable of organizational learning.

Despite criticisms of the learning organization concept as being a challenge to measure and concretely develop, this thesis still argues in favour of its study, over organizational learning. In keeping with the need to stay adaptable and change in turbulent times, it can be argued to contribute more to generative learning, allowing for judgments and evaluations to be made and best practices put forth (Dawson 1994). This is more beneficial compared to the learning processes of organizational learning that seem to suspend these crucial judgments and evaluations. Another argument in favour of using the concept of a learning organization is because they tend to adopt definitions that incorporate behavioural change while definitions of organization learning might not. Not only is behavioural change essential to a sustained competitive advantage, but some would also argue that if no

cognitive and behavioural changes occur the organization has not in fact engaged in learning, (Fiol & Lyles 1985; Garvin 1993; Sanchez 2005).

In order to develop a learning organization, it is also important that an organization build upon its learning capabilities. Learning capabilities must be fostered by a leader, and it is arguably through this mechanism that an organization truly learns (Popper & Lipshitz 2000). The following section not only further discusses the learning capabilities concept, but also introduces one way that an organization can develop its learning capabilities as suggested by Goh (1998). Additional discussions regarding how a leader can facilitate as well as influence these capabilities are elaborated on in the leadership section, discussed later.

2.1.2 Learning capabilities. While a learning organization refers to a particular kind of organization, as previously discussed, an organization's learning capability refers to specific practices and processes that specifically management needs to put in place in order to reap the benefits of a learning organization. Therefore, being a learning organization requires an understanding of the strategic internal drivers needed to build a learning capability (Stata 1989). Even though a learning organization refers to a particular type of organization that must happen by design rather than by accident through the efforts of a leader, discussions of a learning organization are alone insufficient if a company is going to harness their competitive advantage. Therefore, the ability to think creatively, innovate, experiment and push boundaries, alone is inadequate. McGill et al (1992) argue, "Reframing an organization's approach to its environment must be supported by an internal reframing of processes and managerial practices that put these ideas into action (p. 10)." Additional support for this perspective can be found in Leonard-Barton 1992; Garvin 1993; Popper & Lipshitz 1998, 2000; & Goh 1998. Some of these practices and processes are outlined by Goh (1998) by the way of strategic building blocks and are what is known as an organization's learning capability.

Goh's (1998) extraction of management practices and policies related to a learning organization support the link between leadership and learning and are considered next. Outlined are five strategic blocks which include: 1) clarity and support for mission and vision, 2) shared leadership and involvement, 3) a culture that encourages experimentation

and 4) the ability to transfer knowledge across organizational boundaries, and finally the 5) encouragement of teamwork and cooperation. These building blocks are supported by two foundational requirements: an organizational design that supports the building blocks and relevant employee skills and competencies. These tenets are critical in aiding a learning organization to develop its learning capabilities. In the subsequent section, a brief description of both foundational elements necessary to build a learning organization as well as the five tenets required to develop an organization's learning capabilities will be discussed. The table below summarizes the foundational elements as well as the five building blocks:

Table 1: Elements of a Learning Organization

| Foundational Elements | |
|----------------------------------|--|
| Organizational Design | Flat, decentralized, not stifled by many bureaucratic rules and procedures. |
| Employee Skills and Competencies | Continually train employees to have the requisite skills and training that are transferable |
| Five Tenets | |
| Clear Mission & Vision | The organization must communicate a clear vision and mission that is subsequently supported by all employees |
| Shared Leadership | Leaders must empower their subordinates by allowing them to share in the decision making |
| Culture of Experimentation | The organization must create an environment where learning, experimentation and curiosity are rewarded |
| Knowledge Transfer | Employees must be able to transfer clear and concise new knowledge across organizational boundaries. |
| Teamwork & Cooperation | Teamwork and group problem solving must be emphasized in order to develop new innovative ideas |

First, in order to be an organization that is capable of adapting to change quickly as well as place continuous learning at the forefront, an organizational design that is flat, decentralized and not stifled by many bureaucratic rules and procedures is a necessity. Goh and Richards (1997) support this perspective having found a negative relationship between formalization and learning. The work of Mohrman and Mohrman Jr (1995) also provide additional support for this perspective suggesting that learning organizations are typically flat, a nonhierarchical structure with limited formal procedures and rules.

Second, learning organizations continually train their employees to have the requisite skills and training. This ensures that their employees are capable of meeting the challenges of an ever-changing business environment. Such an emphasis on employee skill and competency development is unlike a typical organization that offers training tailored to a particular job. Instead, a learning organization trains their employees on important behavioural skills that are arguably more transferable in such work environments (Kiernan 1993). Unlike traditional organizations, learning organizations also tend to invest in training that will develop the skills set of an entire team or work unit, rather than waste resources on individual level training (Goh 1998). Having well-trained employees is better for business as well as maintaining ones competitive stronghold because it mitigates the production of defective products as well as products that fail to meet the needs of the customer (Saks and Haccoun 2007).

Each of the five strategic building blocks or learning capabilities that are a necessity for developing a learning organization will now be discussed in turn.

First, a clear understanding of the organization's mission and vision that is formulated by the leader and shared by the employees is necessary. Without a clear understanding of the role each employee plays in meeting company objectives, employees do not feel capable of taking initiative and developing creative ideas (Goh 1998). Second, given the flat, organic structure of the organization, leaders must be comfortable sharing leadership. By losing the reins of control and allowing employees to be involved in key decision making for example, allows according to Senge (1990) the creation of a common experience and the development of shared mental models about problems and issues in the organization. Third, given the importance of continuous learning for a learning organization, a leader's ability to foster a culture that facilitates experimentation is imperative. Fourth, the ability to not only create new knowledge but also transfer and share it across the organization so that it can be institutionalized is also key. Finally, given the growing interdependence between work teams and the need to gather input from several parts of an organization in order to handle an organizational issue, teamwork and cooperation are also important.

In sum, a learning organization refers to a particular type of organization with certain strategies and structures in place that encourage learning (Dodgson, 1993). Studies show that

these organizations outperform their competition and can maintain a competitive advantage because they make continuous learning a priority (Appelbaum & Gallagher 2000). These organizations are also important to study because through the creation, acquisition and transfer of knowledge, as well as the modification of their behaviour to reflect new knowledge (Garvin, 1993) they are capable of meeting the challenges of today's turbulent business environments. In order to develop a learning organization, organizations must also develop their learning capabilities. It is here that the leader's role in facilitating an organization's capability to learn is understood. A large body of literature supports the role of a leader in facilitating learning capabilities (Senge 1990; Davenport & Prusak 1998; Naot et al 2004; Montes et al. 2005; Chang & Lee 2007; Singh 2008; Kurland et al 2010). This thesis elaborates on this relationship by examining how leaders, both transformational and transactional, influence the development of learning capabilities. Ulrich et al (1993) define a learning capability as the ability of a manager to generate and generalize ideas with impact. Practitioners should not overlook the link between leadership and learning as its study can enable organizations to reevaluate how they train their leaders to best facilitate learning.

Having just introduced the literature on learning organizations, how the development of learning capabilities is important, as well as alluding to the potential influence of leadership on organizational learning capabilities; the next section begins with a discussion on leadership and the importance of the leader in effectively managing an organization (Collins & Porras 1994). Following that discussion, two types of leadership (transformational and transactional), which are the focus of this thesis, are introduced. Finally, how both styles can contribute to learning, a culture conducive to learning and knowledge creation and management, a central element of a learning organization, are discussed in detail.

2.2 Leadership

A further discussion about leadership is needed having acknowledged that the development of a learning organization should happen by design rather than by accident. Essentially, leaders have the responsibility to set the necessary conditions to develop effective learning capabilities. By taking a normative perspective, Shaw and Perkins (1991) as well as Hannah and Lester (2009) suggest that leaders can develop learning capabilities through strategic actions and specific interventions. Aragon-Correa et al's (2007) findings

support a strong and positive influence between leadership and learning, which was also found to indirectly influence a firm's level of innovation.

Unlike the previous trait like characterizations of leadership which saw it as inborn, leadership is now perceived as being dependent on individual characteristics, leader behaviour and styles, and finally the environment or situational factors. Therefore, the previous romanticized idea of leadership as the easy solution to an organizational problem is challenged. Recent conceptualizations of the construct now take into consideration that leadership is something that is constrained by several things: the organizational structure; the environment both internal and external, power coalitions, personal characteristics, level of the leader, and employee perceptions, for example.

Despite the shift towards considering leadership as a dynamic concept, many still advocate the role of leader as central to the organization. Tolbert and Hall (2009) define leadership as “motivating followers to achieve the outcomes that the leader seeks, and requires them to adopt these outcomes.” Likewise, Burns (1978) and Prewitt (2003) emphasize that the role of the leader is to provide a direction or path for their followers in order to achieve desired outcomes. Selznick (1957) identified four other roles of a leader: to a) define a mission and role for the organization; b) provide purpose; c) defend the integrity of the organization and d) finally manage internal conflict. Some also argue that leaders are important to an organization because they are responsible for attracting, motivating, rewarding, recognizing and retaining employees (Singh 2008). Others perceive that leaders are important because they directly affect important outcomes such as organizational satisfaction, commitment and effectiveness (Bass 2000) as well as group and morale satisfaction, performance and productivity (Yukl 1981). Still others, like Zagorsek, Dimovski and Skerlavaj (2009) posit that leaders are important because of the nature of their status within the organization, in addition to serving as centers of information.

In the previous section, some of the roles that leaders possess were discussed as well as why leaders are considered important to the functioning of an organization. Next, literature on the transformational and transactional leadership styles is highlighted. These two commonly studied styles of leadership and are the focus of this research.

2.2.1 Transformational and Transactional Leadership. Both styles are not two ends of one dimension as initially conceptualized by Burns (1978). Bass (1985) conceived of three related though independent factors making up transformational leadership: a) charismatic and inspirational leadership b) intellectual stimulation and c) individualized consideration. Three factors were also defined as constituting transactional leadership: a) contingent reward (positive/negative) b) management by exception (active or passive) c) laissez-faire.

A transformational leader raises the awareness of their followers to what is important, gets them to focus on achievement, as well as encourages them to go beyond their self-interests for the good of the group or organization. They articulate a desired vision for the future and outline how to achieve it. Transformational leaders also set high standards, provide examples for employees to identify with as well as strive to align the interests of the organization and its employees. They also encourage followers to question assumptions, think outside the box, conceptualize new ways of looking at old problems, resultantly promoting innovation and creativity. Finally, through individualized consideration, this leader would treat each employee differently, catering to their own individual needs for support and development. Examples of leaders that embody the characteristics of a transformational leader include: Gandhi, Martin Luther King Jr., Hitler and more recently the late Steve Jobs, President Obama and the late Jack Layton.

Transactional leaders engage in an exchange relationship with employees. This exchange relationship is built on reciprocity. Through contingent reward, these leaders set, clarify and communicate objectives to their employees, who in turn strive to achieve these performance objectives and are rewarded through pay, recognition or praise. Charles de Gaulle is a popular example of a leader that adopted a transactional leadership style. A leader adopting management by exception would only provide criticism, corrective feedback or disciplinary action when standards were not met. A laissez faire leader would essentially abdicate all leadership responsibilities by avoiding decisions and procrastinating.

Studies such as den Hartog (1997) and Bass, Avolio, Jung and Berson (2003) provide support for the 6-factor model of leadership and confirm the model to have good fit. Despite support for the model, the resultant construction of the Multifactor leadership Questionnaire (MLQ) initially developed by Bass (1985) has been criticized by many for its lack of

discriminant validity among certain leadership factors, failure to take the situation into consideration as well as for including behaviours and attributes in the same scale. Although Bass et al's questionnaire has subsequently been revised to refine the analysis tool, the measure developed by Podsakoff et al (1990) which builds upon the original work of Bass et al remains the more robust of the two. It clearly delineates each facet of leadership and emphasizes contingent reward as the primary facet of transactional leadership. The table below outlines each dimension of both leadership styles as conceptualized by Podsakoff et al (1990) that will be adopted for the purposes of this study.

Table 2: Dimensions of Leadership

| Transformational Leadership | Transactional Leadership |
|---|---|
| <i>Identifying and Articulating a Vision:</i> provides direction and a sense of purpose | <i>Contingent Reward Behaviour:</i> rewards the inclusion of learning processes into the work routine, offers benefits for meeting the desired level of performance as well as encourages intelligent failure |
| <i>Providing an Appropriate Model:</i> gives the employee a sense of what needs to be achieved and how to do so. | |
| <i>Fostering the Acceptance of Group Goals:</i> aligns the interests of the organization and its employees | |
| <i>High Performance Expectations:</i> emphasizes superior performance | |
| <i>Providing Individualized Support:</i> supports the needs of each employee so that they are capable of questioning assumptions and become involved in decision making processes | |
| <i>Intellectual Stimulation:</i> encourages employees to think outside the box, engage in creative problem solving and experimentation | |

The main driver for studying these two forms of leadership instead of participative/directive, consultative or the strategic conceptualizations of leadership is because with the latter the distinction between leader and follower can be blurred. By having followers make leader free decisions and take up leadership positions as needed depending on their expertise it is harder to determine whom the actual leader is. It then becomes unclear who is responsible for creating the ultimate vision and culture of the organization. It must be the responsibility of a designated leader to take ownership of business initiatives, provide direction and purpose as well as involve their employees. It can also be argued that aspects of the consultative leadership style such as the opportunity for followers to voice their opinions

and concerns and the leader being considerate of the interests and welfare of their followers are already incorporated under the transformational leadership facets of inspirational motivation, intellectual stimulation and to some degree by individualized consideration as described above. In addition Bass (1999) argues that both a transformational and transactional leader can be a mix of both participative or directive leadership orientation.

Having a better understanding of the difference between transformational and transactional leadership, the next section discusses how leaders influence important building blocks of learning such as vision and culture. Then, the link between leadership and learning is elaborated upon by discussing how both leadership styles contribute to learning. It is noted that previous literature has mainly emphasized the role of the transformational leader in this process. Therefore, it will also be argued that transactional leaders can also contribute to learning.

2.2.2 Leadership and learning. Leaders as noted previously are central to an effective organization. It is their responsibility according to Senge (1990) to: a) foster generative learning, b) act as a designer, teacher and steward and c) harness the creative tension.

“Generative learning unlike adaptive learning requires new ways of looking at the world...it requires seeing the systems that control events” (p. 9). To engage in generative learning he posits that leaders need to build shared mental models, challenge prevailing mental models and foster systematic ways of thinking. Through this, leaders are responsible for building an organization “where people are continually expanding their capabilities to shape their future” (p. 9). Leaders are also expected to act as a coach and guide working to serve their employees rather than be a hands-off expert. They are also charged with the responsibility of resolving the “creative tension”- the difference between ones current reality and the articulated future vision. Part and parcel of a leader’s vision is creative tension.

Several researchers have emphasized the importance of a vision, mainly from the perspective of a transformational leader, regarding it almost as a given for leadership (Kurland et al 2010). According to Burns (1978), a strong vision provides followers with the strong sense of purpose they need to act. It is important that a leader’s vision is not only

communicated to all employees but it must also be shared. Kurland et al (2010) not only provide support for the idea that a vision must come from a leader but also that it partially mediates the relationship between leader and organizational learning. Findings from Yeo (2003) suggest that one of the most important factors that strengthen learning is communication of a clear mission and vision.

In addition to articulating an adequate vision, the leader according to Schein is also responsible for “building an organization’s culture and shaping its evolution, a unique and essential function of leadership.” Others like Lakomski (2001) would disagree, claiming that it is unfair to place this responsibility on a leader who is arguably as invested and steeped in the culture as their employees and likewise seeks consistency. Instead, Lakomski suggests that a change in the overall internal/mental schemas is necessary in order for change to occur. Most literature supports the former perspective, emphasizing that the creation of a learning organization and resultant learning culture needs to be implemented by top management (Johnson 2002; Bass & Avolio, 1993). Therefore, a leader is essential in creating a culture that is conducive to learning, an important part of a learning organization. According to Bass et al’s notion of the cascading effect, it is through the leader’s setting of the vision that other managers and employees within the organization receive their signal as to how to act and what actions will be pursued by the company. Supporting this perspective, Prewitt (2003) suggests that it is the function of the leader to set a path towards a goal and motivate others to follow it, focus on envisioning the organization’s future, strategize a course of action for achieving goals and inspire and motivate followers. Prewitt (2003) along with Yeo (2003) also argue that for learning to occur a conducive culture is needed—one where learning is valued and rewarded and elements that impede learning are not tolerated.

In this thesis it is assumed that learning can be facilitated by one’s supervisor (their immediate leader). In addition, an individual perspective will be taken instead of a multilevel one. It can be argued then, that whatever a manager does to facilitate learning is applicable at all levels because the manager is an employees’ representative to top management, and vice versa. Simply, supervisors are the formal link between the organization and the employees (Strutton, Toma & Pelton 1993). Literature also supports that trust in a specific person is

more relevant in terms of predicting outcomes than is the global attitude of trust in a generalized other (Butler 1991).

Given the previous discussion regarding how a leader contributes to an organization's effectiveness with an emphasis on generative learning, development and communication of a well-articulated shared vision and fostering of a culture conducive to learning, this next section will describe how transformational and transactional leadership styles have differential effects on learning.

2.2.3 Transformational leadership and learning. Several studies have focused primarily on the role of transformational leadership in facilitating learning (Johnson 1998; Farrell 2000; Naot, Lipshitz & Popper 2004; Crawford 2005; Montes et al. 2005; Singh 2008; Kurland et al 2010; Hetland et al 2011) because it is this kind of style that is thought to best meet the needs of change and adaptability in a turbulent environment. Likewise, Slater & Narver (1995), Manni & Benton (1999) and Snell (2001) also posit that transformational leadership is one of the most important means of developing a learning organization and therefore argue that their capacity to manage knowledge is also greater. Howell and Higgins (1990 a,b,c) and Crawford et al (1998, 2003) further support the notion that “champions of innovation were significantly more transformational” because these leaders emphasize a culture of learning in organizations, attach a high value to knowledge and encourage questioning and experimentation. Findings from an empirical study conducted by García-Morales et al (2008), as well as Jung et al (2008) suggest that transformational leadership is positively related to both organizational learning and innovation. Paulsen et al (2009) further support these findings in their study with research and development teams. Not only do transformational leaders foster the conditions that facilitate the creation of knowledge, Bryant (2003) argues that they also share knowledge at the individual and group. Sharing or transferring knowledge is important to a learning organization because it encourages the integration of new knowledge into the organization. Both the construction (Nailon et al 2007) and management of knowledge (Conger 1999) are essential elements of a learning organization (Garvin 1993). Managing knowledge effectively can also contribute to the company's sustained competitive advantage (Rowley 1999).

In order to facilitate learning, a transformational leader also consults with their subordinates “what is missing and the changes that are required to becoming a learning organization.” (Bass 2000, p. 26). By treating each employee differently and catering to their own individual needs for support and development, these leaders further provide their employees with the tools to facilitate learning and experimentation. Bennet & O’Brien (1994) posit that managers that place an emphasis on learning strive to support staff development, encourage risk taking and share insights. They also articulate a shared vision, act as mentors and coaches, receive and give feedback, facilitate open communication and careful listening. By engaging in all these behaviours, the leader is demonstrating shared leadership, one of the tenets to facilitating a learning organization. This serves to empower employees, facilitate trust, and encourage an experimenting culture (another building block of a learning organization) and resultantly the creation of new knowledge. Simply then, transformational leaders encourage inquisitiveness, encourage people to break through learning boundaries (Bass 1985) and motivate people to want to learn (Slater & Narver 1996). Additionally supporting the role of transformational leadership in learning is the conceptual work of Nailon et al (2007).

Transformational leadership is also perceived to be the only style responsible for developing a collectively shared vision and culture conducive to learning and change (Waldersee 1997). Therefore, transformational though not transactional leaders are perceived as affecting the vision of a learning organization, by providing an emotional commitment and sense of purpose. Studies have shown transformational leaders to strongly influence their employees’ self-efficacy, level of team cohesion as well as confidence in striving for the organization’s vision (Podsakoff et al 1990; Hargis, Watt, Piotrowski 2011). They create a collective feeling that something must be done (Waldman & Yammarino 1999). Transactional leaders, on the other hand, are perceived not to affect the vision or the formation of the culture of an organization. Kurland et al (2010) emphasized the importance of a vision to developing a learning organization. It was perceived as the starting point of the transformation process. Several other studies also support the notion of a collective vision being important for organizational learning (Senge 1990; Bass 2000; Johnson 2002). According to Senge (1994) transformational leaders are needed because people lack the

power, vision and ability to bring about change and when they do, they need a leader who is participative and encourages them to take initiative and work creatively.

It can be argued then that transformational leaders are beneficial in times of change, like turbulent business environments for example, when risk taking and creative problem solving are essential. Nemanich and Keller (2007) support this perspective in their field study analyzing the role of a transformational leader in an acquisition initiative. Similarly, Waldman et al (2001) also concluded that transformational leaders influence organizational performance, particularly in uncertain versus certain environmental conditions. Such leaders, unhappy with the status quo are constantly looking for opportunities to adapt and change and encourage their employees to do the same, therefore fostering a culture that is open to learning. Bass & Avolio (1993) support this notion by positing that leaders concerned about organizational renewal foster cultures that are hospitable and conducive to creativity, problem solving, risk taking and experimentation. As a result of double loop learning, promoted by transformational leaders, Nailon et al (2007) would argue that employees are more likely to engage in ways of learning that promote creativity and critical analysis, making employees more intrinsically motivated, engaged and committed to the organization's goals. The importance of leaders striving for continuous improvement, constantly scanning the environment for growth opportunities as well as encouraging innovative thinking and experimentation, in order to facilitate learning, is supported by Slocum et al (1994).

Despite the strong emphasis in the literature with regards to a transformational leaders' influence on learning, others like Shamir (1995) posit that transactional leaders can also play a role. It can be argued that by transactional leaders honoring commitments to their employees a sense of consistency and commitment is built that can also impact learning. Therefore, one of the contributions of this thesis is to argue that transactional leaders can influence learning and they do so differently compared to transformational leaders.

2.2.4 Transactional leadership and learning. Transactional leaders engage in an exchange relationship with employees and are responsible for setting, clarifying and communicating objectives to their employees. These leaders also foster a culture that is very different from that of a transformational leader. Rather than cultivating innovation and risk

taking, a transactional culture focuses on transactional relationships and functioning within the boundaries of the organization. Consequently, this contractual agreement provides employees with a sense of comfort in consistency and reliability, given that they know exactly how they will be rewarded for thinking creatively and problem solving in an innovative manner. This is important for learning because, by transactional leaders clarifying expectations, responsibilities and tasks, and entering into a stable contractual agreement with the employee, it allows the employee to more concretely see their role in achieving the new direction envisioned by a transformational leader. The importance of clarifying ones responsibilities and consistency in reward should not be underestimated, and is very important in times of instability and change (Long & Mao 2008). Avolio and Bass (1991) as well as Hargis et al (2011) note the benefits of honouring this exchange agreement on performance and extra effort from employees. When a transformational leader is trying to envision and communicate an adequate vision for the company, it can be a time of great uncertainty and stress. Findings from Beehr et al (2003) support a positive link between role ambiguity by a supervisor and strain, maladaptive responses to stress in the work environment. Podsakoff et al (2006) support the relationship between contingent reward behaviour and a reduction in role ambiguity as a result of clarified performance expectations. By having a clear sense of ones expectations and how one contributes to achieving an organization's vision, employees are more likely to engage in teamwork, experimentation and the transfer and sharing of knowledge so as to integrate it into the current system and processes. Reduced role ambiguity is also related to positive outcomes such as increased job satisfaction, organizational commitment and performance.

Shamir (1995) was the first to argue that by consistently honouring transactional agreements, the leader builds a sense of trust, dependability and an image of consistency. Zagorsek et al (2009) extends this argument by positing that “without a solid base of transactional leadership, transformational leadership might not develop to its full extent” (p 159). Vera and Crossan (2004), like Jansen et al (2009), offer rationale for the benefits of both transformational and transactional leadership on learning, depending on the situation. They propose that transformational leadership is best in times of change and uncertainty and have a positive impact of feed- forward as well as feed-back learning processes. The former process encourages the firm to “innovate and renew” while the latter is about “refreshing,

refining and reinforcing learning.” In times of stability however, transactional leaders are preferable and have a positive impact on feed-back learning. Therefore, “operating within an existing system, transactional leaders seek to strengthen an organization’s culture, strategy and structure” (p 244). The transactional leader’s role in facilitating feedback learning is important because it ensures that the organization’s processes are continually updated, new knowledge integrated and institutionalized and that the organization can continue to perform successfully, maintaining its competitive advantage long after the environmental instability has passed. They also “motivate organizational members to use and take advantage of existing learning” (p. 229). Bucic et al’s (2010) qualitative case study data with a team perspective also supports Vera and Crossan’s propositions regarding the differential benefits of both transformational and transactional leaders.

Though results are mixed, few studies exist in the literature linking transactional leadership and performance (Greene 1976; Podsakoff et al 1984; Lowe, Kroeck & Sivasubramaniam 1996; Bass et al 2003; Podsakoff et al 2006). Furthermore, Sims (1977) posited that reinforcing desired performance through contingent reward/punishment is crucial for the development and maintenance of employee performance. This further supports the notion that it is because transactional leaders protect the status quo and correct for deviations in achieving the vision that they are able to facilitate better organizational performance. Additionally, Vera and Crossan (2004) also point out that “firms that lack feedback learning fail to remember...disregard past learning and since routines fail to provide guidance, individual learning is driven entirely by context” (p. 229). Relying on the context is unrealistic in turbulent business environments, and a definite way for the business to fail.

Bryant (2003) also supports the role of both transformational and transactional leaders in the creation and management of knowledge for the purposes of learning. Like most researchers, he posits that knowledge creation and sharing is the role of the transformational leader, with their emphasis on creativity, innovation and challenging the status quo. These are arguably important during times of change or instability, is the driving force behind an organization’s competitive advantage, and can occur at the individual or group level. The role of transactional leaders, on the other hand, is seen as that of a “coordinator” so as to

ensure that the firm's objectives are reached. By facilitating the coordination between various groups in the organization, these leaders have the crucial role of "exploiting knowledge." This refers not only to the process of integrating and institutionalizing new knowledge into the organization's current processes but also "converting knowledge into revenue-generating products and services" (Bryant 2003, p. 35). This is important in times following change, and is arguably when the new knowledge is put into practice and utilized. Likewise, Jansen (2009) and Vera and Crossan (2004) support the link between transactional leadership and exploitative innovation. They argue that these leaders "provide the focus and discipline individuals need to concentrate on efficiency and to become consistently better at performing current routine" (p. 9). Contrasting a transactional leader's ability to make small refinements to processes, they also posit that transformational leaders positively influence exploratory innovation. Given their propensity to challenge institutionalized thinking, motivate employees to think creatively, be inquisitive and innovate, organizations with transformational leaders are perceived to be able to develop new products and services and remain competitive.

Transactional leaders then, foster learning by clarifying performance expectations and responsibilities; by offering rewards when the desired levels of performance are achieved, when new learning approaches and creative ideas are introduced into the work routine, when new knowledge is created; and finally by facilitating the integration and institutionalizing of knowledge to update/refine existing processes (Vera & Crossan 2004). The importance of encouraging employees to create and manage knowledge, so that it can be used to modify one's behavior is an important part of the learning process. Also, rewarding employees with innovative ideas that might have failed could cultivate a "no blame" learning culture, where mistakes are seen as opportunities to grow. Central to a "no blame" culture is the concept of trust, which will subsequently be discussed. An employee needs to be able to feel secure and trust that the ideas that they generate will not be received with unjust retribution regardless of the outcome. By rewarding those who positively contribute to learning as well as to those who learn from their mistakes and make intelligent failures, the culture of experimentation tenet of an organization's learning capabilities is reinforced. Additionally, when employees are encouraged to share with their colleagues the positive as well as negative outcomes of their experimentation, learning can be furthered and better

outcomes (e.g. more efficient products and procedures) can be achieved. This facilitates the knowledge transfer tenet of developing an organization's learning capability. The importance of learning from failure to bolster learning and responsiveness to one's environment is supported by Slocum et al (1994) and Nutt (2004). Similarly, Carmeli and Sheaffer's (2008) findings support a positive link between an organization learning from failure and its capacity to adapt to the external environment. Learning from failure not only encourages experimentation and the subsequent taking advantage of new opportunities, but also increases a company's preparedness for potential crises when such experiences are shared and institutionalized. Simply then, transactional leaders also foster learning when they encourage a culture of experimentation that rewards intelligent failures and considers them an opportunity to learn. The role that transactional leaders play should not be underestimated given that findings from Yeo (2003) suggest that one of the most important factors that weakens learning is the lack of reward and recognition. Similarly, Ulrich et al (1993) support the need for organizations to create symbols of learning, this can arguably be achieved through offering reward.

In sum, despite the disproportionate focus in the literature on transformational leaders' influence on learning, it can be proposed that both leadership styles can influence learning and do so in different ways. Transformational leaders, as conceptualized by Podsakoff et al (1990), can contribute to learning by the following: they provide their employees with a sense of direction and purpose by articulating a clear vision; they support staff development by encouraging inquisitiveness and the pushing of boundaries; they emphasize creative problem solving; and, they provide employees with a model of superior performance that they expect. These leaders are crucial in times of change when innovation and risk taking are essential (Versa & Crossan 2004; Crawford 2005; Singh 2008; Kurland et al 2010; Bucic et al 2010). In contrast, transactional leaders influence learning by clarifying expectations and rewarding employees for meeting the desired standards of performance. They encourage employees to take advantage of existing knowledge that has been refined as well as establish a sense of stability, reliability and consistency that facilitates learning. These leaders also reward intelligent failures, further facilitating an organizational culture where all types of learning are encouraged. There is research to support the notion that a lack of reward and recognition weakens learning. A transactional leader's presence in an

organization complements that of a transformational leader, and as such should not be perceived as a hindrance to the creation and sharing of knowledge, like proposed by Bryant (2003).

2.2.5 Leadership and organizational learning capability. Having discussed in detail to this point how both leadership styles contribute to learning in different ways, a link can now be made between how such leaders can develop an organization's learning capability, as briefly discussed in section 2.1.2.

Though the five building blocks suggested by Goh (1998) provide the essential elements of an organization's learning capability, it is the role of experimentation and knowledge transfer that are argued to be the main drivers (Goh 2003; Goh & Ryan 2008). As has already been discussed, a transformational leader's articulation of a shared *vision* provides the employee with a sense of purpose and direction as well as allows them to focus on a common goal. By offering feedback, open communication and an opportunity for employees to raise their concerns, (as is the role of a transformational leader) the leader is engaging in *shared leadership*. This serves to empower employees, facilitate trust, and encourage an *experimenting culture* and resultantly the creation of new knowledge. Transformational leaders can create a culture of experimentation by emphasizing continuous learning and calculated risk taking. They do this by encouraging employees to come up with new and innovative ideas, rethink previously held assumptions and problem solve in innovative ways. A transactional leader can reinforce such a culture by rewarding the creation of new knowledge, creative and innovating thinking and problem solving as well as when employees learn from failure. The importance of encouraging employees to create and manage knowledge so that it can be used to modify one's behavior is an important part of the learning process. Going hand in hand with the ability to create knowledge is the ability to *transfer* it within and from outside the organization. Learning from failure as encouraged by both leadership styles is also important here. When employees share with their colleagues the positive as well as negative outcomes of their experimentation, learning can be furthered and better outcomes (e.g. more efficient products and procedures) can be achieved. Finally, in the effective sharing of new knowledge, *teamwork and cooperation* are also necessary. It is only when employees work in collaboration with one another and there is a willingness to

work together and share information can learning be facilitated. As a result, both transformational and transactional leaders can encourage the development of an organization's learning capabilities. The former is primarily responsible for creating a vision and suspending their need for control via shared leadership while both types of leader complement one another in facilitating a culture of experimentation, the transfer of knowledge across organizational boundaries and emphasizing team work.

In addition to the strategic building blocks or learning capabilities necessary to foster a learning organization, additional suggestions for developing these capabilities can be garnered from the literature. Like the discussion above, transformational as well as transactional leaders are capable of implementing these practices.

To ensure that management adequately develops an organization's learning capabilities, the literature offers a number of suggestions with regard to actions that can be taken. In order for this to occur, Slocum et al (1994) posit that learning strategies like a) a strategic intent to learn, b) commitment to continuous experimentation and c) learning from the past and from failures should be at the forefront. To achieve the first, during times of change, transformational leaders would strive for continuous improvement, constantly scanning the environment for growth opportunities and managing the creative tension between the organization's current state and desired future position. To accomplish the second, the transformational leader would encourage the creative and innovation thinking of their employees and embrace these ideas. Finally, both leaders could facilitate the last strategy. Transformational leaders ensuring open communication with their employees as result of the prior strategy and transactional leaders treating failures as opportunities to learn would be beneficial. In order for the benefits of this last strategy to be realized, a "no blame" culture with a high degree of trust is needed, a concept that will subsequently be discussed in further detail. An employee needs to be able to feel secure and trust that the ideas that they generate will not be received with unjust retribution.

A number of facilitating factors as outlined by Nevis et al (1995) that can be incorporated into the learning organization and learning capabilities archetype presented by Goh (1998) will be described next.

In one part of their comprehensive model of organizational learning, Nevis et al (1995) describe ten facilitating factors of learning that can be advanced by managers to foster Goh's (1998) strategic building blocks of learning. The first two factors- scanning imperative and performance gap aid in the creation of a leader's mission and vision. Similar to Slocum et al's strategic intent to learn, it involves comparing ones internal environment to the external one and identifying areas of learning. The facilitating factor of involved leadership supports the notion of shared leadership as the leader articulates a shared vision, communicates it with employees and solicits feedback and engages in its implementation. The four facilitating factors of experimental mind-set, climate of openness, continuous education and operational variety, combine to support the management practice of experimentation. Employees are encouraged to come up with creative and innovative solutions to problems, share them in an environment of open communication, are rewarded for their creativity but are not punished for their failures. This fosters a climate where continuous learning through a variety of methods is encouraged. Having multiple advocates of a new idea in various units of an organization and adopting a systems thinking perspective (also supported by McGill et al 1992) facilitates both team work and cooperation as well as knowledge transfer since interdependencies are created.

Given that knowledge transfer (Goh 2003; Goh & Ryan 2008) is a crucial building block in developing an organization's learning capabilities, Goh (2002) provides a concise integrative framework for managing it effectively. To begin, a culture of collaboration and cooperation is needed between employees. There needs to be a willingness to work together and share information as well as a certain degree of trust to facilitate the process. Teamwork, especially the use of cross-functional teams is important here. A supportive organizational structure also enables the transfer of knowledge. Diminishing organizational hierarchies and encouraging horizontal communication as well as modifying the reward system to reflect these changes all serve to facilitate knowledge transfer. Being cognizant of the knowledge recipient by ensuring not only that the knowledge is accessible but usable as well, is important. Lastly, finding different ways to capture both tacit and explicit knowledge will also affect the effectiveness of knowledge transfer.

Ulrich et al (1993) also outline specific leader behaviours to ensure an organization's learning capability. They describe several ways a manager can build commitment to the development of these capabilities. Four in particular, a) making learning a visible and central element of the organization's strategic intent, b) creating symbols of learning, c) investing and d) publicly talking about learning could easily be encouraged by a leader who is both transformational or transactional in nature. The first could be achieved by a transformational leader through the company's mission and vision statement. The second could be achieved by a transactional leader offering reward for outstanding performance. A transformational leader through individualized consideration of their followers could invest in learning by providing them with developmental opportunities to enhance their skills and abilities. By publicly talking about learning, both leaders could reinforce the company's new vision and bring the employee's values in line with the organization's values. To further develop learning capabilities, Ulrich et al (1993) also suggest that managers can encourage their employees to look at new ways to augment existing processes to make them better and more efficient. To facilitate experimentation, managers should emphasize innovation and the approaching of ideas and problems in a new way. The main thrust of the model however is when these innovative ideas are generalized. Two management actions that are relevant to the discussion on learning include: systematically building learning competencies and management actions that positively reward the generalizing of ideas. The first action being the responsibility of the transformational leader (via individualized consideration) seeks to make a conscious effort to ensure that employees have the requisite knowledge, skills and abilities. Applied examples of specific actions include job rotations and assignments across divisions as well as the promoting of people known as learners. The second action is the responsibility of the transactional leader. For example, rewarding employees when they learn from postmortems of mistakes, as well as successes, encouraging and rewarding experimentation, and holding people accountable but not punishing for mistakes all contribute to an organization's learning capability. Such organizations realize that learning comes from small failures and encourage "intelligent failures." To ensure, this managers need to develop a culture of no blame where people are comfortable with taking risks, such a culture is dependent on trust, a concept that will be discussed subsequently.

The table below offers a summary of the literature supporting the role of both leadership styles in contributing to the development of an organization's learning capabilities.

Table 3: Review - Leaders Contributing to a Learning Organization

| Strategic Building Blocks of Learning Capabilities | Type of Leadership | Approach | Practical/ Applied suggestions |
|--|----------------------------------|---|---|
| Articulate Clear Vision | Transformational | Emphasize learning as a visible element to the organization's strategic intent (Ulrich et al 1993). | Strive for continuous improvement by scanning the environment looking for growth opportunities. Also, determine the future path of the organization relative to its current position (Slocum et al 1994; Nevis et al 1995) |
| Shared Leadership | Transformational | Leaders suspend their need for control and empower employee participation (McGill et al 1992; Nevis et al 1995) | Offer feedback to employees Provide opportunity to raise concerns Emphasize open communication through soliciting of employee feedback on key decisions and organizational processes |
| Experimental Culture | Transformational & Transactional | Transformational leaders motivate employees to learn by fostering creativity, continuous experimentation & calculated risk taking (McGill et al (1992; Ulrich et al 1993; Slocum et al 1994; Nevis et al 1995) Leaders create symbols of learning (Ulrich et al 1993) by offering rewards for successes as well as intelligent failures. | Transformational Encourage the creation of new ideas, rethink assumptions, revise old processes to ensure efficiency, Encourage open communication by allowing employees to air out problems Encourage employees to proactively seek out problems and come up with creative solutions; foster creativity (Ulrich et al 1993; Nevis et al 1995) Provide development opportunities to enhance new skills and abilities through job rotations and assignments across divisions for example (Ulrich et al 1993) Transactional Reward the creation of new knowledge, innovative thinking and creative problem solving as well as when employees learn from failure |

| | | | |
|--------------------|----------------------------------|--|---|
| Knowledge Transfer | Transformational & Transactional | <p>Leaders value all outcomes of learning (both successes and failures) and encourage employees to share their experience with their colleagues without fear of punishment or rebuke.</p> <p>Learning outcomes are seen as an opportunity to learn (Slocum et al 1994)</p> | <p>Goh 2003; Goh & Ryan 2008- create a culture of collaboration and cooperation between employees; transparent decision making; fair treatment and distribution of rewards; diminish organizational hierarchies; utilize cross functional teams</p> |
| Teamwork | Transformational & Transactional | <p>Given the increased integration and interdependencies between tasks and teams in the workplace, leaders must encourage teamwork and group problem-solving by employees and reduce the dependency on upper management.</p> | <p>Similar to the conditions that facilitate Knowledge Transfer: create a culture of collaboration and cooperation between employees; diminish organizational hierarchies; utilize cross functional teams Goh 2003; Goh & Ryan 2008</p> <p>Encourage employees to share with their colleagues both their experience of success and failure.</p> |

Having established clear, individual links between transformational, transactional leadership and learning, the potential influence of trust on the relationship will now be examined. The subsequent section will begin by providing a background on trust, followed by a discussion on how it can be fostered by both styles of leadership and eventually contribute to learning.

2.3 Trust

In the past, the concept of trust received cursory attention in the literature because it was perceived as a “fundamental ingredient or lubricant, and an unavoidable dimension of social interaction” (Gambetta 1988, p. viii). More recently, it has been given increased focus because its study is seen as critical to organizational effectiveness (Zeffane & Connell, 2003).

The nature of business is changing and there is a greater need for elements in an organization to work together and be interdependent if they are to survive and remain successful. The changing composition of the workforce, the changing nature of work to include more self-managed work groups and virtual employees, the turbulent economic times and surge of globalization in the last decade all emphasize the centrality of trust in the modern business arena. Sydow (1998, p. 31) provides support for this point of view by suggesting that “in a world of increasing uncertainty and complexity, flat hierarchies, more participative management styles and increasing professionalism, trust is thought to be a more appropriate mechanism for controlling organizational life.”

2.3.1 Conceptualizations of Trust. Several conceptualizations of trust exist in the literature. Some perceive trust to be a stable individual trait known as a propensity to trust. This trait perspective is something that is internal to each person and is unaffected by the environment around them (Rotter 1954, 1967). Others think of trust as a process and emphasize the development of trust in a relationship instead of trust as a stand-alone construct (Khodyakov 2007). They study the development of trust either from the perspective of the follower and how they interpret the relationship with the leader (relational-

based perspective) or by examining how a leader's character influences a follower and their propensity to trust (character based perspective). There are still others that conceptualize trust as an emerging state. As a result, trust is thought to vary as a function of contextual factors as well as inputs, processes, and outcomes (Marks et al 2001). Therefore, trust is continually evolving and developing depending on one's interactions or specific situations. By taking this perspective, trust in leadership can be viewed as an input into communication or as an outcome of the relationship between an employee and their leader (Marks et al 2001).

In addition to the various conceptualizations of trust, trust can also be studied on a variety of different levels- organizational, inter-organizational as well as at the interpersonal level between leader and employee. Trust will be studied from the latter perspective in this thesis, (leader versus employee) rather than from an organizational standpoint. This level of analysis is appropriate given that the influence of a leader on a learning organization has been the focus of study throughout. Literature also supports the notion that "trust in a specific person is more relevant in terms of predicting outcomes (e.g. learning organization and learning capabilities) than is the global attitude of trust in generalized others" (Butler 1991, p. 647). It can be argued then that trust fostered between a leader and follower has a greater subsequent influence on learning than trust fostered between an organization and its employees. The work of Konovsky & Pugh (1994) supports this perspective by suggesting that when an employee trusts their manager, they may generalize that trust across the organization since they perceive the manager as a representative of the organization. To measure an employee's trust in their supervisor, the concise scale developed by Gabarro & Athos (1976) was used. This scale was chosen over the widely used measure by Schoorman et al (1996) and Mayer et al (1999) because it is more parsimonious and it does not measure the antecedents of trust (ability, benevolence and integrity), which is outside the scope of this study.

2.3.2 Definitions of Trust. Numerous definitions also exist in the literature with regard to trust. For instance, some researchers have perceived trust as an outgrowth of a social connection between people (Tyler 2003; Dietz & Den Hartog 2006). Others like Mayer et al (1995) and Rousseau et al (1998) view trust as a more psychological state and

place emphasis on the willingness to be vulnerable in an interaction. Oftentimes, there is also conceptual confusion between the construct of trust and ideas linked to cooperation, confidence and predictability (Mayer et al 1995). The integrative model of trust as conceived by Mayer, Davis & Schoorman (1995) however, is widely regarded as the most holistic explanation for the development of trust between two individuals (Pillai et al 1999; Serva et al 2005; Burke et al 2007). It is one of the few conceptualizations to emphasize the willingness to be vulnerable to risk as central to trust. It also outlines the role of an employee's propensity or general willingness to trust as a determinant of whether one party develops trust towards another as well as clearly delineates antecedents or characteristics that a trustee must possess (such as ability, integrity and benevolence) and outcomes of trust. Mayer et al (1995) then, conceptualize trust as the "willingness of a party to be vulnerable (put themselves at risk) to the actions of another party based on the expectation that the other will perform a particular action important to the trustor" (p. 712).

With a greater understanding of the general concept of trust: its various conceptualizations, levels of analysis as well as accompanying definition, how leaders can influence trust will be discussed next.

2.3.3 Leadership and Trust. Trust can also be established directly by a manager, a relationship that is supported by a large body of literature (Fairholm 1994; McAllister 1995; Creed & Mile 1996; Shaw 1997). Argyris (1996) argued that trust developed at the top management level aided in overcoming defensive routines that have been shown to hinder learning. The relationship between a leader and trust is further supported in the findings by Korsgaard et al (2002) when they analyzed how two managerial trustworthy behaviours as outlined by Whitener et al (1998) relate to trust in one's manager. Though they only looked at the openness of communication between manager and employee and demonstration of concern, the other three behaviours posited by Whitener: a) behavioural consistency, b) acting with integrity and sharing and c) delegating control by the leader can conceivably be performed by both kinds of leader and consequently relate to trust. Yang and Mossholder (2010) also relate trust in one's supervisor to positive outcomes such as increased in-role and extra-role behaviours, organizational commitment and job satisfaction. The importance of

trust in leadership and its impact on performance, particularly extra-role behaviours, is further supported by Sharkie (2009).

A meta-analysis conducted by Dirks and Ferrin (2002), on trust in leadership, provides empirical support for the relationship between transformational leader behaviours and trust. Given that a transformational leader is charged with the responsibility of setting a compelling direction and an enabling structure, (Hackman 2002) this is proposed to affect an employee's perception of their leader's ability, an essential antecedent of trust (Burke et al 2007). By providing a shared vision, a clear direction and sense of purpose an employee is motivated to rise up to the challenge and reduce the creative tension created by a leader's vision. Through open communication and the opportunity to provide suggestions and raise concerns in general or with regard to key decisions in particular, an employee feels valued and increases trust in their leader. Such actions can be perceived as indicative of a consultative leadership style or a facet of transformational leader, subsumed under the facets of idealized influence and inspirational motivation. Regardless, Podsakoff et al (1990), Pillai et al (1999), Jung and Avolio (2000) and Gillespie and Mann (2004) provide support for these actions contributing to trust. Facets such as individualized consideration and intellectual stimulation cause a leader to make special efforts to tailor the development of each employee's knowledge, skills and abilities based on their needs. In addition, efforts to guide, coach and mentor the employee will also favourably contribute to trust in the leader, as it demonstrates concern and respect for the employee (Conger et al 2000; Gillespie & Mann 2004). Employees (via intellectual stimulation) are also forced to challenge the assumptions they hold in the spirit of thinking creatively and innovating. This has been proposed to contribute to an employee's perceptions of benevolence towards their leader, yet another antecedent of trust (Burke et al 2007). Though at first blush it may seem that all facets of transformational leadership contribute to trust, a breakdown of the facets reveal mixed results. According to Podsakoff et al (1990, 1996), Butler et al (1999) and MacKenzie et al (2001), behaviours such as providing an appropriate model (inspirational motivation), individualized support and fostering the acceptance of group goals are all positively associated with trust. Mixed results were found for facets such as articulating a vision, setting high expectations and stimulating new ways of thinking (intellectual stimulation). Likewise, Gillespie and Mann (2004) found that facets such as consulting team

member when making a decision and communicating a collective vision in addition to sharing common values with the leader as predicting 67% of the variance in team members' trust towards the leader.

The relationship between transactional leadership and trust is a bit more controversial in the literature. Unlike transformational leadership, transactional leadership according to Bass (1985); Podsakoff (1990); Pillai et al (1999); Jung and Avolio (2000), is argued not to engender trust given the exchange rather than relational aspect of their relationship. Simply, they argue that the contingent reward facet of transactional leadership does not instill the same level of trust compared to the intellectual stimulation, individualized consideration and inspirational and charismatic qualities of a transformational leader. Empirical support for this view was garnered from the work of Podsakoff et al (1990) and Pillai et al (1999). This thesis opposes this view arguing instead that consistent behaviour and the outlay of expectations signals commitment and a sense of predictability to an employee, both of which are associated with promoting trust between a leader and follower. Such consistency in leadership behaviour also provides a sense of reliability in the leader and serves to build trust (Zagorsek et al 2009). Support in the literature can be found for a positive relationship between transactional leadership and trust (Butler et al 1999; Jung and Avolio 2000; MacKenzie et al 2001; Dirks & Ferrin 2002 and Gillespie & Mann 2004). Shamir (1995) argues that the consistent honoring of transactional agreements builds an employees' trust in their leader. Such consistent behaviours serve to increase perceptions of competence (ability) of the leader, consequently fostering trust. Having a clear understanding of what is expected of one's performance and how in turn one will be rewarded reduces ambiguity as proposed by Burke et al (2007), and will result in perceptions of fairness and benevolence by the leader, again reinforcing trust.

In addition to being able to establish trust with an employee by virtue of their leadership orientation, a manager can also ensure trust by acting in a just and fair manner. Support from the literature suggests that when people are treated fairly, or perceive justice, trust is nurtured. (Schminke 1990; Greenberg 1990, 2003; Ambrose & Schminke 2003). Perceptions of justice are linked to trust through integrity, the final antecedent to trust (Mayer et al 1995). An employee's perceptions regarding the degree to which their

supervisor adheres to the set of principles they themselves follow and find acceptable, influences the degree to which they perceive integrity. Integrity then, can also be influenced if both parties share the same values. Findings from Gillespie and Mann (2004) emphasize the importance of shared values contributing to trust. Though there are three separate types of justice (procedural, distributive and interactive), procedural and distributive are the two forms that have been the focus of study in relation to trust.

Procedural justice, being the degree to which policies and practices involved in attaining a particular outcome are fair (Folger and Greenberg 1985; Konovsky & Pugh, 1994) relates to transformational leadership (Pillai et al 1999). By transformational leaders empowering their employees to express their opinions and be involved in the decision making of various procedures, employees are more likely to perceive them as fair. Also these leaders treating their employees fairly through individual consideration raises their perceptions of procedural fairness. Korsgaard et al (2002) found that independent of a manager's behaviour, employees perceived their manager as more or less trustworthy as a function of whether the organizations policies were fair or not. Distributive justice on the other hand is unconcerned whether the processes in achieving an outcome are fair. Instead, this type of justice "is the typical metric for judging the fairness of transactional contracts and economic exchanges" (Konovsky & Pugh 1994). Given that transactional leaders are responsible for setting clear expectations of performance and the distribution of rewards for meeting these targets, they can influence perceptions of distributive justice as well. (Pillai et al 1999). Overall, though perceptions of fairness in general can be linked to trust, there is literature to support the fact that procedural justice may be more influential in engendering trust (Lind & Tyler 1988; Folger & Konovsky 1989; Konovsky & Pugh 1994). Regardless, trust is associated with openness, experimentation, and a reduction in defensive mechanisms that prevent learning (Argyris, 1964). Tan & Tan (2000) provided empirical support for this proposition since their findings suggest that trust in one's supervisor is positively correlated with a subordinate's innovative behaviour. Trust also leads to more information sharing (Butler 1999; Abrams et al 2003; Levin et al 2006), which as discussed in the next section is beneficial for learning as well.

Given that it has just been argued that leaders are capable of establishing trust with their employees through their interactions, a case will now be made for how such trust influences learning by creating a culture that is conducive to learning.

2.3.4 Trust and Learning. A learning culture according to Prewitt (2003) is one where learning is valued and rewarded and elements that impede learning are not tolerated. Employees therefore, need a sense of trust in order to feel free to create and share their innovative ideas without the sense that they will be blamed for failure or receive punishment. Trust, according to Fukuyama (1995), presupposes the development of inter-organizational relationships which leads to inter-firm knowledge exchange. A safe environment of open communication and information sharing is the result when a learning culture places an emphasis on trust. Sonnenburg (1994) and Fairholm (1994) support this notion by proposing that high levels of trust create an environment in which innovation can flourish. Barriers to knowledge transfer and generation like defensive mechanisms as posited by Argyris (1996) are also reduced if trust is present. Support for this idea can also be found at the group level. The work of Burke et al (2007) suggests that when trust and mutual respect are present, members of a group feel free to make suggestions and question decisions without fear. This is an important insight because trust doesn't just facilitate knowledge at the individual level but at the group level as well where it can more widely be generalized and subsequently institutionalized.

Given that the creation and sharing of information can be perceived as risky (Zand 1972), the more one is perceived to trust another the greater the amount of information sharing (Butler 1999). A large amount of literature exists supporting the role of trust in facilitating the sharing of knowledge, and consequently learning (Mayer et al 1995; Abrams et al 2003; & Levin et al 2006). This relationship also serves to facilitate a climate where more opportunities for innovative behaviour can result. Such behaviour can be an important source of learning as new ideas are developed and experimented with. The noted benefits of trust as contributing to learning are most apparent in high-reliability organizations (HROs). These organizations such as, hospitals, airports and nuclear power plants work to foster a “no blame” culture. Given that the consequences of error are detrimental in these organizations, a

sense of trust is needed where employees are encouraged and often rewarded for reporting errors and near misses. These practices are important in organizations that want to learn.

However, in traditional hierarchical organizations, it is observed that employees are not motivated to report or discuss their experiences of failure because they fear negative feedback or retribution. This according to Vince & Saleem (2004) is a hindrance to learning as employees get caught in a vicious cycle of cautious behaviour and blame. The adverse effects of a controlling management style and a culture of blame results in the stifling of creative ideas as noted by Schilling and Kluge (2009). Carmeli and Scheaffer (2008) also provide empirical support for the argument that organizations that learn from failure have a greater capacity to adapt to the external environment (learning organization). Being fearful of failure, employees act with tentative caution and when negative outcomes ensue they are unlikely to take responsibility and instead engage in blaming behaviour. As a result, they fail to reflect on failure and learn from it as well as communicate the experience to others so that they too may learn. A proposition put forth by Schilling and Kluge (2009) supports this perspective. They posit that employees being fearful of rebuke results in a lack of communication and transfer of knowledge to other team members. These organizations tend then to become complacent only engaging in behaviours that produce a success bias. Such conditions negate the development of a learning organization where the main focus is continuous learning through the development of new knowledge. In HROs however, employees are supported, arguably because of the trust fostered within the organization to be proactive, preemptively identify problems and develop constructive solutions. The importance of preemptive scenario planning in preparation for potential future challenges was a suggestion emphasized by DeGeus (1988) when developing an organization's learning capability. Though there are costs associated with a traditional organization's implementation of a "no blame" culture, the centrality of trust in these organization and its benefits to learning should not be ignored. In sum, continuous knowledge obtaining, which according to Niu (2010) is "associated with finding a balance between developing, transferring and accessing information within a company" and can be likened to a learning organization provides a company with a sustained competitive advantage. Trust according to Edmondson (1999) and Niu (2010) is argued to enable this.

2.3.5 Trust as a mediating factor. Working within a learning organization can cause a person to feel vulnerable to risk. There is a constant emphasis on creating, acquiring, sharing knowledge in an effort to re-evaluate ones existing assumptions and mental model and modify ones behaviour to reflect new knowledge. Leaders being able to facilitate trust through their behaviour and perceptions of justice signals to the employee that they are cared about. Prewitt (2003) suggests that when care is high, employees are freer with information, less worried about rebuke or punishment for failure and therefore likely to participate in the active exploration of new ideas and knowledge. Trust in leadership then, according to Burke et al (2007) facilitates learning. When trust is fostered, oftentimes there is open communication, people are more likely to share information and engage in discussion of ideas. This, as alluded to above, leads an employee to experiment, perform innovative behaviours, find creative solutions and therefore become more effective at problem solving, and consequently learning. Krot and Lewicka's (2011) findings support this perspective given that trust in one's leader was found to support greater innovation.

Given the preceding discussion, a clear link can be made between leadership and trust as well as from trust to learning. These links lend well to the possibility of a potential mediating role of trust on the relationship between leadership and learning. Trust is crucial because it signals to the employees, according to McGill et al (1992) that it is the process of learning that is important, regardless of whether the outcomes are positive or negative. By focusing on the process and placing less emphasis on the outcomes, all types of learning are valued. Trust as a result can be thought of as the supporting building block of a no blame culture in an HRO. This is because it reduces defensive mechanisms (Argyris 1996), as well as the fear that one cannot share their experience of failure because nothing can be learnt from it. Both of these in turn, prevent learning. Trusting that one will receive positive rewards for coming up with creative and innovative approaches to new and potential problems as well as for identifying areas of growth can be seen as a given considering that a learning organization's main goal is continuous learning and the creation of new knowledge. Trusting, however, that an organization will value "intelligent failures" and reward an employee for learning from their mistakes is less easy to understand given that traditional hierarchical organization do not typically value mistakes let alone the sharing of them. This is a folly, to facilitate the creation of a learning organization and fully develop its learning

capability, then, failures must also be supported and seen as opportunities to learn, grow and improve (Ulrich 1993; Slocum et al 1994; Goh 2002). This can only be achieved if the sanctions for failure are diminished.

Without trust, it can be argued that the opportunities for a learning organization to reach its full potential and subsequently develop learning capabilities are reduced. Leaders, both transformational and transactional can continue to emphasize creative and innovative thinking and problem solving as well as reward such behaviour, but if trust isn't fostered, employees are unlikely to fully contribute to learning. It is only when employees feel supported and are able to share the successes as well as failures of their experimentation and can trust that both will be valued that the full potential for learning is reached. Carmeli & Scheaffer (2008) support the argument that organizations that learn from failure have a greater capacity to adapt to the external environment.

In addition to trust providing that sense of support to an employee to learn and experiment, regardless of the outcome, it also implies that everyone will be treated fairly and equally with access to the same information and opportunities as their peers. Given that leaders (an immediate manager) represent the organization in its entirety in their interactions with employees, the importance of trust cannot be underestimated. Kanter (1977) argued that an organizational structure that supports the employees by giving them access to information and resources to do their job as well as provide them with opportunities to learn leads to increased empowerment. Though her model doesn't implicate the role of trust, one can argue that employees must trust in the organizational structure that is meant to support their learning. Only then when one trusts is a sense of empowerment achieved. Such empowerment can be fostered through both formal and informal characteristics of the job and leads to important outcomes such as increased employee satisfaction and commitment to the organization. Such things are important in a turbulent business environment where resources need to be used effectively in an effort to adapt. Therefore, the final aim of this study will be to empirically test the proposition that trust in addition mediates the link between a leader and a learning organization.

In sum, taking the interpersonal perspective, trust between a supervisor and their employee is the focus of this study. Trust is perceived as the missing link and mediator

between leadership and learning. Without trust, the opportunity for a learning organization to reach its full potential and subsequently develop learning capabilities is reduced. Practitioners should not underestimate the importance of trust because without it, employees are less likely to experiment; share the outcomes of their learning, particularly when they are negative; innovate or push boundaries. This inevitably leads to the limited development of the organization's learning capability and ability to remain flexible and adapt to today's turbulent business environments.

3. SUMMARY OF THE LITERATURE REVIEW AND EXAMINED RELATIONSHIPS BETWEEN LEADERSHIP, LEARNING AND TRUST

This thesis identifies and aims to fill a gap in the literature on learning organizations. Previous work in the area has primarily implicated the transformational leadership style as contributing to learning. These leaders are charged with the responsibility of having to provide direction and purpose through a shared mission and vision, provide individual consideration for each employee and encourage them to reach above and beyond their needs to contribute to the wellbeing of the organization. As a result, employees are encouraged to think creatively, experiment, innovate and come up with unique solutions to potential problems. Given such an orientation, it is evident how such a style facilitates the learning organization's role of continuous learning, something that is of utmost importance in today's ever changing business environments.

This thesis also argues that the largely understudied concept of transactional leadership can also serve to facilitate learning and its contributions should not be discounted. A leader with a transactional orientation would provide consistency and clarify expectations by offering consistent rewards and punishment. This sense of consistency and clarity is important in times of continuous change when employees seek reliability and stability in their leader. This type of leader would also support the learning initiatives implemented by the transformational leadership style by rewarding instead of punishing creative thinking and experimentation. By encouraging the trial and error of new ideas, these leaders would further cultivate a culture that is open to learning. Therefore, this thesis also aims to extend the research on leadership and learning by arguing that both leadership styles, transformational and transactional, have merit when studying learning.

Furthermore, given that there is risk in working within a learning organization and having to deal with the consequences of a failed idea and a tumultuous business environment, trust is needed in order to reap the benefits of a learning organization. The importance of trust being fostered by a leader is best summarized by Kouzes and Posner (1995, p. 30) "above all else we must be able to believe in our leaders. We must believe that

their world can be trusted, that they'll do what they say..." When trust is established with a leader, employees are more likely to come up with and share creative ideas because they feel like their contributions are valued regardless of the outcome and do not fear unjust retribution. This serves to enable continuous learning and sustain the development of a learning organization and its capabilities. Therefore, this thesis will also examine the mediating influence on trust on the relationship between leadership and learning.

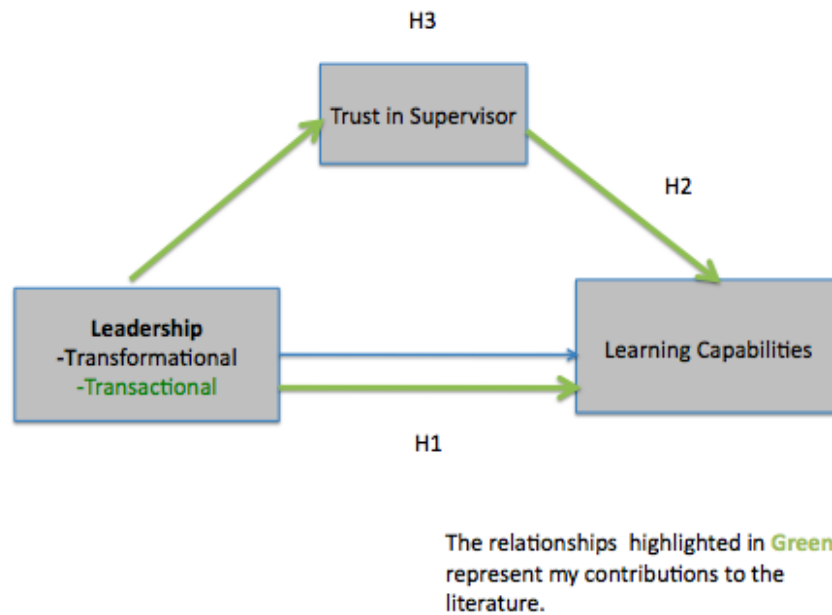


Figure 1: Conceptual Framework

4. RESEARCH QUESTIONS AND HYPOTHESES

The purpose of this study is to empirically explore the relationship between leadership and learning. First, the differential impact of both transformational and transactional leadership in the facilitation of a learning organization and the development of its learning capabilities will be examined. Furthermore, this study will also implicate the potential influence of trust between a leader and employee and its subsequent impact on learning. Therefore, the following research questions and hypotheses are put forth:

1. Does leadership (both transformational and transactional) influence the development of a learning organization as well as its learning capabilities?
2. What differential effects do both leadership styles have on learning?
3. What role does trust play in the facilitation of learning? Does trust function as a mediator, linking leadership to learning?

Hypothesis 1: Leadership (both transformational and transactional) will have a positive impact on the development of a learning organization and its learning capabilities.

Hypothesis 1a: Transformational leadership will have a stronger positive relationship to an organization's learning capabilities than transactional leadership.

Hypothesis 2: Trust will have a strong positive relationship to an organization's learning capabilities.

Hypothesis 3: Trust will mediate the relationship between leadership and learning capabilities.

Hypothesis 3a: Trust will be more strongly related to transformational than transactional leadership.

The next section provides a brief overview of the sample, data collection method, and measures used to capture each studied construct. The research methodology used to evaluate the hypotheses will also be discussed.

5. METHODOLOGY

The sample, data collection and analysis procedures as well as measures used in this study will be described in the following sections.

5.1 Sample, Data Collection & Analysis Procedures

Over the course of two months, a number of organizations were contacted in an effort to recruit a varied sample of respondents. Each organization was approached with a brief letter outlining the purpose of the study and its expected contributions, following which a request to participate was made (Appendix A). If the organization wished to participate, a letter committing their participation and the approximate number of potential respondents was requested. After receiving ethics approval for the study, a subsequent electronic package containing consent forms as well as the online link for the survey was provided to the central contact in the organization to distribute.

The snowball sampling technique was used to recruit different organizations to participate in this study. This sampling method involves sampling participants based upon referrals from previous participants (Trochim & Donnelly 2008).

The 2-part survey used in this study was constructed after receiving ethics approval and was designed using the online SurveyMonkey® Gold edition package. This package allowed for the collection of unlimited responses as well as the creation of a customizable survey template. The survey was an amalgamation of four previously developed questionnaires, designed to measure the main constructs in this study (transformational and transactional leadership, learning capabilities and trust). This made up section two, of the two-part survey. In the first section, as recommended by Andrews, Nonnecke and Preece (2003), the employee was asked to fill in some personal information. This section incorporated all of the control items included in this study.

Variables such as gender were controlled for, given the abundance of literature supporting the differential effects of each gender on leadership (Ridgeway 2001, Carli & Eagly 2001, Eagly & Johannesen-Schmidt, 2001). Age was also controlled for, considering the research findings by Oshagbemi (2004) suggesting that older and younger managers

adopt different leadership styles. In addition, findings by Kakabadse et al (1998) provided evidence for the fact that age can strongly influence the shaping of attitudes and behaviours of senior leaders within the organization. Additional variables such as tenure within the organization and education were also controlled. It can be argued that the longer an employee has been with an organization or the higher their level of education, the greater their opportunity to advance to a leadership position.

In order to confirm that the survey was clear, concise, and measured each construct reliably, a small group of participants were used as a pilot study. This group included MBA students as well as members of the Telfer School of Management administrative staff. Feedback from this group of 26 participants was solicited to ensure the clarity and comprehension of the survey. Overall, the feedback was positive and raised no major concerns. In addition, it was estimated that the survey should take no longer than 15 minutes to complete. For a copy of the survey distributed to participants, please refer to Appendix C.

After conducting internal consistency analyses on the pilot study responses, the survey was finalized. All variables were found to reliably measure each construct. The cronbach's alpha for transformational and transactional leadership was α 0.971 and α 0.856 respectively. The cronbach's alpha for supervisor trust and learning capabilities was also sufficiently high at α 0.920 and α 0.946 respectively. The initial correlations between variables were also high and in the intended direction.

Once ethics approval for the study was received from the University of Ottawa and the survey was developed on SurveyMonkey,[®] an electronic package providing a brief summary of the study, consent forms and the online link for the survey was sent to the central contact in each participating organization to distribute to their team. Each employee that wished to participate in the study was requested to read the consent form thoroughly before agreeing to complete the survey, by clicking the link provided. Participants were also assured that their responses would remain confidential, their participation voluntary and that they could opt out, without penalty, at any time. Taking into account the difference in availability and responsiveness of each organization, the remainder of the data collection period lasted 6 weeks. Each organization was sent subsequent reminders requesting that their

employees participate in the survey. All the data gathered from the surveys was kept completely confidential and was only accessed by the Principal Investigator and the thesis supervisor.

The five hypotheses being evaluated in this study were analysed using the multiple regression methodology in SPSS version 18 for Macintosh. In each analysis, the independent variables (transformational and transactional leadership, trust) were systematically entered into the regression. This was done in order to give each variable equal consideration in the analysis. Several regressions were conducted in order to examine the combined as well as individual influences of the independent variables on the dependent variable. In each analysis, the six variables that served as controls were controlled for and model summary and coefficient statistics were examined. Additionally, a summary of the descriptive statistics for the sample as well as a correlation table and breakdown of each regression analysis is provided in the subsequent section.

Ultimately, thirteen different organizations operating in either the public, private, healthcare or “other” sectors participated in the study. Five observations were removed from the analysis because they were consistently identified as outliers across all study measures. The table below provides a breakdown of the total sample by sector (N=180).

Table 4: *Participants by Sector*

| | Frequency | Percent | Cumulative Percent |
|-------------|-----------|---------|--------------------|
| Private | 108 | 60% | 60% |
| Public | 32 | 18% | 78% |
| Health Care | 21 | 12% | 90% |
| Other | 19 | 10% | 100% |
| Total | 180* | 100% | |

* 21 of the original responses were unusable because the surveys were incomplete and 5 subsequent responses were removed because they were identified as outliers.

The majority of respondents, at approximately 60% came from the private sector. This is a potential limitation of this study, due to generalizability concerns. The participants were also from a number of industries that included: media, IT, consulting, engineering firms

and health and wellness. Nurses sampled from a hospital setting provided the smallest sample, (n=21) but still provided interesting insights.

The table below provides an additional summary of the study's sample characteristics, based on the demographic information collected. The results are indicative of a very diverse sample.

Table 5: Sample Characteristics

| Characteristic | Descriptor | Frequency | Percent | Cumulative Percent |
|--------------------|---------------------|-----------|---------|--------------------|
| Tenure | 1-5 years | 90 | 50% | 50% |
| | 5-10 years | 36 | 20% | 70% |
| | 10-15 years | 23 | 13% | 83% |
| | 15- 20 years | 11 | 6% | 89% |
| | 20+ years | 20 | 11% | 100% |
| Number of Managers | Yes | 87 | 48% | 48% |
| | No | 93 | 52% | 100% |
| Gender | Male | 92 | 51% | 51% |
| | Female | 88 | 49% | 100% |
| Age | 18-24 | 10 | 6% | 6% |
| | 25-34 | 69 | 38% | 44% |
| | 35-44 | 42 | 23% | 67% |
| | 45-54 | 37 | 21% | 88% |
| | 55-64 | 18 | 10% | 98% |
| | 65+ | 4 | 2% | 100% |
| Education Level | High school or less | 5 | 3% | 3% |
| | College/CEGEP | 27 | 15% | 18% |
| | University | 89 | 49% | 67% |
| | Masters | 53 | 29% | 96% |
| | PhD or higher | 6 | 4% | 100% |

It is noted that half of the respondents in the sample have less than 5 years of service in their respective organizations, while the other half of the sample is more or less evenly distributed between 5 to 20 years of organizational tenure. There is also an even split between respondents in the sample that were identified as managers or non-managers as well

as male or female. The majority of the sample was aged between 25-54 and had a College/CEGEP, University or Masters level education.

5.2 Measures

The table below summaries all of the measures used in this study.

Table 6: Study Measures

| Measures | |
|-----------------------|--|
| Leadership | Podsakoff et al (1990); 28 item; Transformational- 23 items; α 0.945 Transactional- 5 items; α 0.902 |
| Learning Capabilities | Goh & Richards (1997); 21 item; α 0.903 |
| Supervisor Trust | Gabarro and Athos (1976); 7 items; α 0.922 |

Measures were chosen that have previously been widely cited in the literature and have already demonstrated both reliability and validity. The Cronbach's alpha of each measure is also included (in the table above) to denote the estimated reliability of each measure being used (Trochim & Donnelly 2008). This is important to consider in order to ensure that each measure is capturing the concept accurately.

Leadership. An employee's perceptions of the transformational and transactional attributes of their leader were measured using the 28- items scale developed by Podsakoff et al (1990). This measure includes facets of transformational leadership that have received widespread consensus in the literature such as: identifying and articulating a vision, fostering the acceptance of group goals, providing an appropriate model as well as individualized support and setting high performance expectations. In addition, Intellectual Stimulation, a facet of transformational leadership uniquely identified by Bass (1985) and Avolio & Bass (1988) was also included in the model to ensure a comprehensive model of transformational leadership that ultimately resulted in six categories. As a result, this measure of leadership, most clearly delineates each facet. Overall, the measure yielded a α = 0.945 for this sample, and respondents made ratings on a 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree."

Table 7: Sample Items from the Transformational leadership scale

| Transformational leadership | |
|--|--|
| <i>Articulating a clear vision</i> | My leader has a clear understanding of where we are going. |
| <i>Fostering the acceptance of group goals</i> | My leader gets the group together to work for the same goal. |
| <i>Providing an appropriate model</i> | My leader leads by “doing” rather than simply “telling.” |
| <i>Individualized support</i> | My leader behaves in a manner thoughtful of my personal needs. |
| <i>Setting high performance expectations</i> | My leader insists on only the best performance. |
| <i>Intellectual Stimulation</i> | My leader has stimulated me to rethink the way I do things. |

However, conducting an internal consistency analysis on this measure revealed that by dropping three items (#14, 15, 23) the cronbach’s alpha of the measure would marginally improve to $\alpha=0.947$.

Table 8: Transformational Leadership Items (that were dropped)

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item Total Correlation | Squared Multiple Correlation | Cronbach’s Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| 14. My leader insists on only the best performance. | 83.5278 | 195.994 | .371 | .673 | .946 |
| 15. My leader will not settle for second best. | 83.7611 | 195.054 | .358 | .684 | .947 |
| 23. My leader has ideas that have challenged me to reexamine some of the basic assumptions about my work. | 83.722 | 195.788 | .340 | .474 | .947 |

Even the inter-item correlation matrix for these three items indicated that the correlations between these items and other subsequent items were very low. Correlations ranged between -0.005 to 0.790. This indicates that the measure of transformational leadership would not be compromised if the three items were dropped.

To measure transactional leadership behaviour, the contingent reward facet was examined. This was done because according to Podsakoff et al (1990, p. 113) it “is the principal behaviour identified by Bass (1985) and Avolio & Bass (1988) to represent this category” or leadership style. Five items from Podsakoff et al’s (1984) contingent reward behaviour scale were incorporated into the 28-item measure of leadership. This measure of both transformational and transactional leadership has most recently been used by Sapna (2010) and Singh (2008). This 5-item scale yielded a $\alpha = 0.902$, and respondents again made their ratings on a 5-point Likert scale ranging from “Strongly Agree” to “Strongly Disagree.” An example of an item measuring this leadership style includes “My leader gives me special recognition when my work is very good.”

Conducting an internal consistency analysis on this measure revealed that by dropping one item (#28), the cronbach’s alpha of the measure would marginally improve to $\alpha 0.907$.

Table 9: Transactional Leadership Item (that was dropped)

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item Total Correlation | Squared Multiple Correlation | Cronbach’s Alpha if Item Deleted |
|--|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| 28. My leader frequently does not acknowledge my good performance. | 14.5278 | 11.848 | .634 | .470 | .907 |

Furthermore, inter-item correlations also support removing the fifth item (item 28 on the leadership scale). The table below shows comparatively low inter-item correlations with fifth item.

Table 10: Transactional Leadership Inter-Item Correlation Matrix

| | 24. My leader always gives me positive feedback when I perform well. | 25. My leader gives me special recognition when my work is very good. | 26. My leader commends me when I do a better than average job. | 27. My leader personally compliments me when I do outstanding work. | 28. My leader frequently does not acknowledge my good performance. |
|---|--|---|--|---|--|
| 24. My leader always gives me positive feedback when I perform well. | 1.000 | .738 | .727 | .720 | .577 |
| 25. My leader gives me special recognition when my work is very good. | .738 | 1.000 | .724 | .669 | .456 |
| 26. My leader commends me when I do a better than average job. | .727 | .724 | 1.000 | .696 | .583 |
| 27. My leader personally compliments me when I do outstanding work. | .720 | .669 | .696 | 1.000 | .646 |
| 28. My leader frequently does not acknowledge my good performance. | .577 | .456 | .583 | .646 | 1.000 |

Learning Capabilities. The Organizational Learning Survey, developed by Goh and Richards (1997) was used to measure an organization’s capability to learn. This 21-item survey, is the most reliable, and measures the five tenets of a learning organization as discussed in the literature review section: clarity of purpose and mission, shared leadership, experimentation, transfer of knowledge and teamwork and group problem solving. The reliability of the survey, in the context of this study, is 0.903 (Cronbach’s alpha). All items were ranked on a 5-point Likert scale ranging from “Strongly Agree” to “Strongly Disagree.”

A higher score indicated that employees perceived their organization as possessing a strong capability to learn.

Table 11: Sample Items from the Organizational Learning Capabilities Survey

| Learning Capability Facets | |
|---|---|
| <i>Clarity of Purpose & Mission</i> | The organization's mission statement identifies values to which all employees must conform. |
| <i>Shared Leadership</i> | Managers in this organization frequently involve employees in important decisions. |
| <i>Experimentation</i> | Managers in this organization encourage team members to experiment in order to improve work processes. |
| <i>Transfer of Knowledge</i> | New work processes that may be useful to the organization as a whole are usually shared with all employees. |
| <i>Teamwork</i> | Most problem solving groups in this organization feature employees from a variety of functional areas. |

Trust in Supervisor (immediate leader). The 7-item scale developed by Gabarro and Athos (1976) was used to measure an employee's level of trust in his/her supervisor. This measure is the most parsimonious when evaluating trust and was most recently used by Tan & Tan (2000), Cassar (2001), Pugh et al (2003) and Jain & Sinha (2005). According to Robin and Rousseau (1994) the Cronbach's alpha coefficient for this measure is 0.93. Similarly, the measure yielded a $\alpha=0.922$ for this sample, and used a 5-point Likert scale ranging from "Strongly Agree" to "Strongly Disagree." A higher score indicated that employees had stronger feelings of trust for their supervisor, compared to a lower score.

Table 12: Sample Items from the Trust in Supervisor Measure

| Trust in Supervisor | |
|----------------------------|---|
| | I am not sure if I fully trust my supervisor. |
| | My supervisor is open and upfront with me. |

6. RESULTS

6.1 Analysis of Data

The multiple regression methodology was used to test the five hypotheses in this study. This type of analysis was chosen because it was appropriate to use given the sample size and because of the many predictor and control variables. For the purposes of this study, the independent variables (x) included: the transformational and transactional leadership constructs and trust. The dependent variable (y) included an organization's learning capability. Each construct was measured using the measures discussed above.

Though using the multiple regression analysis methodology to analyse responses made on a 5-point Likert scale may be concerning, there is literature to support the analytic method proposed in this thesis. Sapna (2010) and Singh (2008) both measure leadership using Likert scales and analyse the responses using multiple regression analyses. Likewise, Tan & Tan (2000) as well as Pugh et al (2003) measure trust using a Likert scale and use regression analyses to examine the data. Using multiple regression analyses is most appropriate when the dependent variable is a numeric value as it allows for the summation and averaging of responses. This produces a continuous statistic that can be more informative than having to fit the data into categories. Simply, though the responses that participants make are discrete values, the summated average of the data is continuous, making multiple regression a more appropriate method to use when analyzing the data. Multiple regression analysis is also the most consistently used methodology in Organizational Behavior/Human Resources research (Bates et al. 1999). According to Lattin, Carroll and Greene (2003) it is also one of the most commonly used forms of analysis of dependence.

The table below provides a summary of the descriptive statistics for the main variables in this study.

Table 13: Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|-----------------------------|-----|---------|---------|--------|----------------|
| Transformational Leadership | 180 | 1.70 | 4.87 | 3.7935 | .62266 |
| Transactional Leadership | 180 | 1.60 | 5.00 | 3.6411 | .82819 |
| Supervisor Trust | 180 | 1.14 | 5.00 | 4.0000 | .79776 |
| Learning Capabilities | 180 | 2.14 | 4.86 | 3.5021 | .50797 |

As evidenced by the table above, there appears to be a wide range in employee responses. There was a tendency however for participants to make ratings on the mid to higher levels of the 5-point Likert scale: transformational leadership (M= 3.79, SD= 0.62), transactional leadership (M=3.64, SD=0.83), supervisor trust (M=4.00, SD=0.80), and learning capabilities (M=3.50, SD= 0.51).

Table 14 provides a summary of the correlations between all the variables included in this study.

Table 14: Correlations between Study Variables

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. |
|---------------------------|---------|--------|--------|-------|-------|-------|--------|--------|--------|-----|
| 1. Sector | 1.0 | | | | | | | | | |
| 2. Tenure | .148* | 1.0 | | | | | | | | |
| 3. Supervisor | .035 | -.112 | 1.0 | | | | | | | |
| 4. Gender | -.454** | -.054 | -.034 | 1.0 | | | | | | |
| 5. Age | .059 | .566** | -.187* | .010 | 1.0 | | | | | |
| 6. Education | -.005 | -.141* | -.115 | .132* | -.014 | 1.0 | | | | |
| 7. Tranf. Leadership | -.088 | -.062 | .155* | -.033 | -.006 | .071 | 1.0 | | | |
| 8. Transc. Leadership | -.059 | -.085 | .258** | -.046 | -.026 | -.034 | .646** | 1.0 | | |
| 9. Supervisor Trust | -.123* | -.042 | .178* | .014 | .020 | .100 | .807** | .607** | 1.0 | |
| 10. Learning Capabilities | -.132* | -.046 | -.027 | .062 | .094 | .202* | .531** | .360** | .598** | 1.0 |

p<0.05* p<0.001**

The correlation table (Table 14) suggests some preliminary support for the study research questions and hypotheses. These significant relationships, along with the suggested influence of some control variables will be discussed in the following section.

Firstly, as predicted, leadership was found to correlate positively to an organization's development of learning capabilities. Furthermore, evidence was garnered for a stronger relationship between transformational leadership and learning ($r=0.531$, $p< 0.001$) than transactional leadership and learning ($r=0.360$, $p< 0.001$). This lends possible support to the notion that both styles of leadership are important contributors to learning. Therefore, unlike what is suggested in the literature, transactional leadership as well as transformational leadership warrants further study in the context of learning.

A significant correlation was also supported between trust in one's supervisor and an organization's learning capability ($r=0.598$, $p< 0.001$). This suggests that the more an employee is willing to be vulnerable in a relationship with their supervisor, and share with them the positive as well as negative outcomes of their job, the greater the organization's ability to learn from such experiences and in turn develop their learning capabilities.

Both leadership styles were also found to strongly correlate with trust in one's supervisor. The relationship between transformational leadership and trust was stronger ($r=0.807$, $p< 0.001$), however, compared to the correlation between transactional leadership and trust ($r=0.607$, $p< 0.001$). Given that transformational leaders are more perpetually involved in an employee's work life compared to a transactional leader from things like: giving them mentoring and coaching opportunities, encouraging them to push boundaries and innovate, and soliciting their input while revising organization processes, it is plausible that these leaders develop stronger bonds of trust with their employees.

In addition, there were also some significant relationships between the main variables in this study and the control variables. Education level ($r=0.202$, $p< 0.05$) and sector ($r=-0.132$, $p< 0.05$) seemed to strongly influence an organization's learning capabilities. These findings suggest that employees who are more highly educated are more likely to understand

the need for organizations to engage in continuous learning, and to be adaptable and flexible, in order to maintain their competitive advantage. Furthermore, given that the organizational culture and structure across the different industries that were sampled varies, it is understandable that sector would also influence learning. Arguably, the initiatives and leadership styles used to encourage learning, as well as the general openness to learning in the private and healthcare sectors would differ from that of the public sector. The increased bureaucracy would present challenges to learning not faced by the other sectors. Additional analyses on the data found support for this perspective, and will subsequently be discussed further.

Whether or not an employee was a manager also influenced perceived levels of supervisor trust ($r=0.178$, $p < 0.05$) as well as whether a leader was thought to adopt a transformational ($r=0.155$, $p < 0.05$) or transactional style ($r=0.258$, $p < 0.001$). These findings suggest that there is strong sense of trust between employees and their supervisors in this sample. In addition, employees were also able to easily distinguish between the two leadership styles. A leader's transactional attributes, however, were more easily identifiable compared to their transformational attributes.

Finally, there were a few relationships between the control variables though intuitive are worth noting. Tenure (length of time in an organization) strongly correlated with age ($r=0.566$, $p < 0.001$). This is supported by generational employment statistics that implicate that previous generations worked for several years in one company. This is in contrast to today's younger workforce that is likely not only to change employment but careers several times in their working life. Whether or not an employee was a supervisor also correlated with age ($r=-0.187$, $p < 0.05$). Arguably, employees in management positions could be older when taking into account the years of experience needed to get to that level in the organization.

The next sections provide a more detailed statistical analysis of the data to support the proposed hypotheses. Several regression analyses with the enter method were used to examine the effects of each independent variable on the dependent variable.

6.2 Hypothesis Testing

Hypothesis 1: Leadership (both transformational and transactional) will have a positive impact on the development of a learning organization and its learning capabilities.

Hypothesis 1a: Transformational leadership will have a stronger positive relationship to an organization's learning capabilities than transactional leadership.

Regression. Learning Capabilities = $b_0 + (b_1 \text{Sector} + b_2 \text{Tenure} + b_3 \text{Supervisor} + b_4 \text{Gender} + b_5 \text{Age} + b_6 \text{Education}) + b_7 \text{Transformational Leadership} + \varepsilon$

Regression. Learning Capabilities = $b_0 + (b_1 \text{Sector} + b_2 \text{Tenure} + b_3 \text{Supervisor} + b_4 \text{Gender} + b_5 \text{Age} + b_6 \text{Education}) + b_7 \text{Transactional leadership} + \varepsilon$

In order to test Hypothesis 1, two separate regression analyses were conducted. First, the criterion variable, learning capabilities, was regressed on the predictor variable, transformational leadership. The regression provided a $R^2 = 0.33$ and demonstrated a good fit to the data ($F = 12.33$, $p < 0.001$). The regression also produced a significant coefficient for transformational leadership ($\beta = 0.426$, $t = 8.18$, $p < 0.001$). A significant coefficient for education level was also observed ($\beta = 0.09$, $t = 2.27$, $p < 0.05$). Overall, the results were supportive and in the intended direction. According to the collinearity statistics (specifically the Variance Inflation Factor statistics and Condition Index), multicollinearity was not at issue. Multicollinearity occurs when one or more predictor variables are a function of another predictor variable and are essentially measuring the same thing. The evaluation criteria specifies that $VIF > 10$ indicate a potential problem, and $VIF > 100$ indicate a severe potential problem (Lattin et al 2003). CI values exceeding 30 also indicate that multicollinearity is a significant problem. None of the statistics in the model exceeded these thresholds.

A second regression analysis was conducted to examine the relationship between transactional leadership and learning. The regression produced a $R^2 = 0.21$ and demonstrated a good fit to the data ($F = 6.44$, $p < 0.001$). A significant coefficient for transactional leadership ($\beta = 0.233$, $t = 5.36$, $p < 0.001$) was also observed. A significant coefficient for

education level was also produced ($\beta = 0.12$, $t = 2.85$, $p < 0.05$). Again, the overall results were supportive, in the intended direction and multicollinearity was not at issue. All VIF statistics were less than 10 and CI values were less than 30.

From this first set of analyses, full support is garnered for Hypothesis 1. Additionally, these findings also support Hypothesis 1a. Transformational leadership appears to have a stronger, positive, relationship to an organization's learning capabilities ($\beta = 0.426$, $p < 0.001$) than transactional leadership ($\beta = 0.233$, $p < 0.001$).

Regression. Learning Capabilities = $b_0 + (b_1 \text{Sector} + b_2 \text{Tenure} + b_3 \text{Supervisor} + b_4 \text{Gender} + b_5 \text{Age} + b_6 \text{Education}) + b_7 \text{Transformational Leadership} + b_8 \text{Transactional leadership} + \varepsilon$

Given that one leader can also embody both transformational and transactional leadership attributes, a third regression analysis was conducted to examine whether the results from a combined analysis differed from the previous individual analyses. In the first model, learning capabilities was regressed on both leadership styles simultaneously. In the second model, transformational leadership was removed. The aim of this regression was to determine whether both leadership styles influenced learning concurrently. When both leadership styles were included in the analyses, $R^2 = 0.34$ and provided a good fit to the data ($F = 10.87$, $p < 0.001$). A significant coefficient was observed for transformational leadership ($\beta = 0.39$, $t = 5.77$, $p < 0.001$) but not transactional ($\beta = 0.045$, $t = 0.88$, $p > 0.05$). A significant coefficient was also produced for education level ($\beta = 0.09$, $t = 2.34$, $p < 0.05$). However, when transformational leadership was removed, in the second model, a significant coefficient was produced for transactional leadership ($\beta = 0.233$, $t = 5.36$, $p < 0.001$). This second model also demonstrated a good fit to the data ($R^2 = 0.21$, $F = 6.44$, $p < 0.001$), supporting the separate role of transactional leadership on learning. A significant coefficient was also observed for education level ($\beta = 0.12$, $t = 2.85$, $p < 0.05$). Again, multicollinearity was not an issue.

Therefore, it appears that Hypothesis 1 is supported, but with a caveat. Both leadership styles positively impact learning, and transformational leadership does have a larger effect. However, when a leader possesses both attributes, transformational, not transactional leadership contributes to learning.

Since the sector variable and learning were significantly correlated ($r=-0.132$, $p<0.05$), an additional subsequent regression analysis was conducted to examine Hypothesis 1 by sector. Interesting results were garnered where leadership preference as it relates to learning differed depending on sector. The private sector, for example, supported the overall findings for Hypothesis 1. Both transformational ($\beta= 0.482$, $t= 6.81$, $p<0.001$) and transactional leaders influenced learning ($\beta= 0.203$, $t= 3.52$, $p<0.05$). However, when a leader embodied both characteristics, the effects of a transformational leadership ($\beta= 0.504$, $t= 5.49$, $p<0.001$) outweighed transactional leadership ($\beta= -0.024$, $t= -0.365$, $p>0.05$). The model including both leadership styles simultaneously in the analysis produced a $R^2=0.356$ and represented a good fit for the data ($F= 7.89$, $p<0.001$). The second model, isolating the effect of a transformational leader in the private sector produced a $R^2=0.355$ and represented a good fit for the data ($F= 9.26$, $p<0.001$). The third model, isolating the effect of a transactional leader in the private sector produced a $R^2=0.162$ and also represented a good fit for the data ($F= 3.25$, $p<0.05$). Multicollinearity was not an issue in either of the models since none of the thresholds were exceeded.

In the public sector, however, our findings differed. Results demonstrated that only transformational leaders influenced learning in this analysis, both when analyzed individually and when combined with transactional leadership. The regression examining both leadership styles concurrently produced a $R^2=0.479$ and represented a good fit for the data ($F= 3.16$, $p<0.05$). A significant coefficient was therefore found for transformational leadership ($\beta= 0.339$, $t= 2.482$, $p<0.05$) but not transactional leadership. A regression examining only transformational leadership produced a $R^2=0.462$ and represented a good fit for the data ($F= 3.58$, $p<0.05$). The regression also produced a significant coefficient for transformational leadership ($\beta= 0.270$, $t= 2.41$, $p<0.05$). In both models, all VIF statistics were less than 10 and all Condition Index Values were below 30, indicating that multicollinearity was not an issue.

Though sampling of the healthcare sector was small ($n= 21$), interesting findings were discovered again. Unlike the public sector, only transactional leaders were found to influence learning, both when analyzed individually and combined with transformational leadership. A model specifying transactional leadership on its own produced a $R^2=0.786$

and represented a good fit for the data ($F= 10.994$, $p<0.001$). A significant coefficient for transactional leadership was produced ($\beta= 0.350$, $t= 5.116$, $p<0.001$). A significant coefficient was also found for education ($\beta= 0.179$, $t= 2.94$, $p<0.05$). When analyzing both leadership styles in the same model, $R^2 =0.830$ and represented a good fit for the data ($F= 11.408$, $p<0.001$). A significant coefficient was produced for transactional leadership ($\beta= 0.487$, $t= 5.111$, $p<0.001$) and education ($\beta= 0.19$, $t= 3.37$, $p<0.05$), but not transformational leadership. Again, multicollinearity was not an issue.

An analysis by “other,” primarily non-profit organizations was not feasible because of its small sample size. No models provided a good fit for the data, and no significant findings were produced.

In sum, both leadership styles individually influenced learning in the private sector. However, when considered together, only transformational leadership influenced learning. Transactional leaders influenced learning in the healthcare sector, while transformational leaders impacted learning in the public sector. A possible rationale to support these findings will be discussed further in the discussion section.

Hypothesis 2: Trust will have a strong positive relationship to an organization’s learning capabilities.

Regression. Learning Capabilities= $b_0+(b_1$ Sector+ b_2 Tenure+ b_3 Supervisor+ b_4 Gender+ b_5 Age+ b_6 Education)+ b_7 Supervisor Trust+ ϵ

To test whether trust, specifically trust in one’s supervisor, was related to learning, another regression analysis was conducted. The regression produced a $R^2 =0.402$ and demonstrated a good fit to the data ($F= 16.49$, $p<0.001$). The findings also supported a significant coefficient for supervisor trust ($\beta= 0.38$, $t= 9.69$, $p<0.001$). Multicollinearity was not at issue, since all VIF statistics were less than 10 and CI values were less than 30. Therefore, full support was garnered for Hypothesis 2, since all the results were supportive and in the intended direction.

Hypothesis 3: Trust will mediate the relationship between leadership and learning capabilities.

Mediation testing was used to evaluate Hypothesis 3. The objective was to determine what role trust in one's supervisor had on the relationship between leadership and learning. This model, as suggested by Baron and Kenny (1986) "recognizes that an active organism intervenes between stimulus and response" (p. 1176). In order to test for mediation, three regression models must be estimated and Baron and Kenny's (1986) conditions for mediation were used as a reference. This criterion has been referenced several times in the literature and is viewed as the best approach for testing full mediation (Mayer & Davis 1999; Korsgaard et al 2002; Bass et al 2003; Pugh et al 2003; Carmeli & Sheaffer 2008; Rowold 2008; Niu 2010).

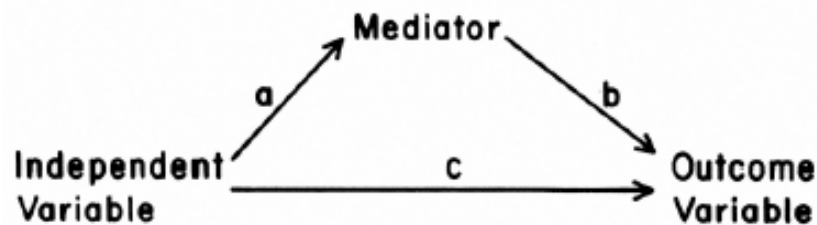


Figure 2: Mediation Paths

Source: Baron and Kenny (1986)

To establish mediation, the predictor variables (transformational and transactional leadership) must first be related to the mediator variable, trust. Next, the predictor variables must be shown to affect the criterion variable, learning capabilities. Finally, when regressing the criterion on both the mediator and the predictor variables, the relationship with the mediator must be significant while the relationship with the predictor becomes reduced (partial mediation) or zero/non-significant (full mediation). Partial mediation is indicative of multiple mediating factors having an influence on the relationship. According to Baron and Kenny (1986) "a significant reduction demonstrates that a given mediator is indeed potent, albeit not both a necessary and sufficient condition for an effect to occur" (p. 1176). Full mediation; however, demonstrates strong evidence for a single dominant mediator.

Regression 1a: Supervisor Trust= $b_0+(b_1\text{Sector}+b_2\text{Tenure}+b_3\text{Supervisor}+b_4 \text{ Gender}+b_5 \text{ Age}+b_6 \text{ Education})+b_7 \text{ Transformational Leadership} +\varepsilon$

A regression analysis including only transformational leadership, the control variables and supervisor trust produced a $R^2 = 0.66$ and indicated a good fit to the data ($F= 47.93, p<0.001$). A significant coefficient for transformational leadership was also produced ($\beta= 1.01, t= 17.28, p<0.001$). Overall, the results were supportive and in the intended direction. There was no evidence of multicollinearity since all VIF statistics were less than 10 and CI values were less than 30.

Regression 1b: Supervisor Trust= $b_0+(b_1\text{Sector}+b_2\text{Tenure}+b_3\text{Supervisor}+b_4 \text{ Gender}+b_5 \text{ Age}+b_6 \text{ Education})+b_7 \text{ Transactional leadership}+\varepsilon$

Next, a regression was performed including only transactional leadership, the control variables and supervisor trust. This regression produced a $R^2 = 0.40$ and indicated a good fit to the data ($F= 16.08, p<0.001$). Significant coefficients were also produced for transactional leadership ($\beta=0.57, t= 9.59, p<0.001$) and education level ($\beta=0.13, t= 2.18, p<0.05$). Overall, the results were supportive, in the intended direction and multicollinearity was not a concern. All VIF statistics were less than 10 and CI values were less than 30.

Therefore, not only was the first condition for mediation satisfied, but full support was also garnered for Hypothesis 3a.

Hypothesis 3a: Trust will be more strongly related to transformational than transactional leadership.

The relationship between transformational leadership ($\beta= 1.01, t= 17.28, p<0.001$) and supervisor trust was stronger than the relationship between transactional leadership ($\beta=0.57, t= 9.59, p<0.001$) and supervisor trust. Both relationships, however, were positive and in the intended direction.

Regression 2a: Learning Capabilities= $b_0+(b_1\text{Sector}+b_2\text{Tenure}+b_3\text{Supervisor}+b_4 \text{ Gender}+b_5 \text{ Age}+b_6 \text{ Education})+b_7 \text{ Transformational Leadership}+\varepsilon$

Regression 2b: Learning Capabilities= $b_0+(b_1\text{Sector}+b_2\text{Tenure}+b_3\text{Supervisor}+b_4\text{ Gender}+b_5\text{ Age}+b_6\text{ Education})+b_7\text{ Transactional leadership}+\varepsilon$

The effects of this relationship were already tested in Hypothesis 1. Both leadership styles were found to, individually, affect an organization's capability to learn. Recall, transformational leadership appeared to have a more stronger, positive, relationship to learning ($\beta= 0.426$, $t= 8.18$, $p<0.001$) than transactional leadership ($\beta= 0.233$, $t= 5.36$, $p<0.001$). Therefore, the second condition for mediation was met in this equation.

Regression 3: Learning Capabilities= $b_0+(b_1\text{Sector}+b_2\text{Tenure}+b_3\text{Supervisor}+b_4\text{ Gender}+b_5\text{ Age}+b_6\text{ Education})+b_7\text{ Transformational Leadership} + b_8\text{ Transactional leadership}+ b_9\text{ Supervisor Trust}+\varepsilon$

Finally, in this model, learning capabilities was regressed on all three predictor variables: trust, transformational leadership and transactional leadership. This regression produced a $R^2=0.41$ and indicated a good fit to the data ($F= 13.10$, $p<0.001$). A significant coefficient was obtained for supervisor trust ($\beta=0.30$, $t= 4.57$, $p<0.001$) while the coefficients for transformational ($\beta=0.12$, $t= 1.40$, $p>0.05$) and transactional leadership ($\beta=0.003$, $t= 0.07$, $p>0.05$) which were previously significant became non-significant. The VIF statistics also indicate that multicollinearity was not an issue. These results not only support Hypothesis 3, the mediating role of trust, but are also indicative of full mediation. For a detailed output of the full mediation result, please consult Appendix D. These results are surprising given that most studies analyzing the complex interactions between humans find support for partial mediation (Baron & Kenny 1986). A potential rationale for the results will subsequently be discussed.

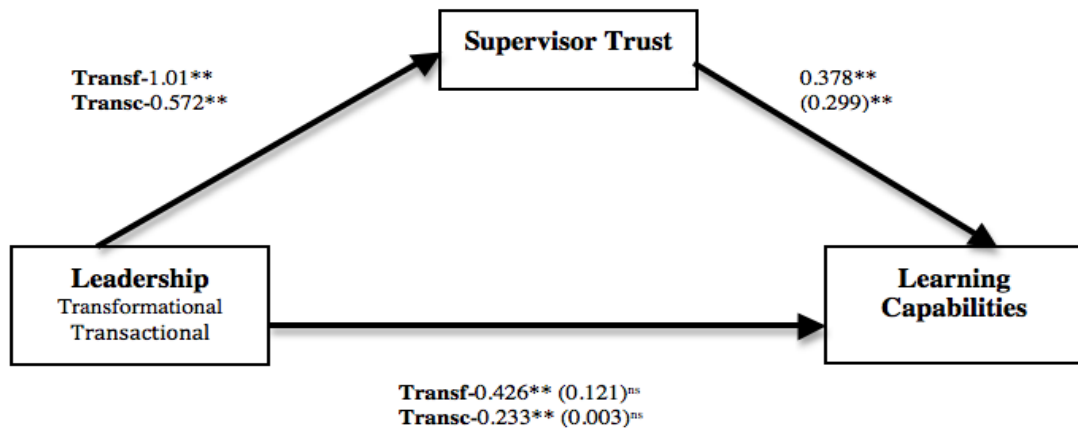


Figure 3: Results - Full Mediation Model

This figure depicts the full mediation model, with the numbers in brackets indicating the relationship between variables at the time of mediation. Leadership is shown to have a strong, positive influence on the development of an organization’s learning capabilities before mediation. After mediation, this relationship is insignificant. Similarly, trust in one’s supervisor appears to also influence learning capabilities prior to mediation. The relationship between trust and learning is still significant and positive when a mediation test is conducted, though slightly weaker.

7. DISCUSSION

In order to face the challenges of a turbulent business environment, organizations need not only to be adaptable but also preemptively anticipate the need for change and make modifications to their strategy accordingly (Senge 1994). This is essential if an organization is to survive as well as maintain its competitive advantage. The purpose of this study has been to examine the relationships between leadership, supervisor trust and an organization's learning capabilities, and as a result further specify how organizations can become learning organizations.

Organizations that modify their structure, internal processes and practices in order to become organizations that are capable of learning are more likely to sustain a competitive advantage and be superior to their competition. Because they are constantly scanning the external environment, anticipating the need for change and preemptively and continuously making small changes to their business processes, they are more likely to swiftly adapt to change, have a greater capacity for experimentation and innovation, bring new products to market, achieve higher performance, and ultimately sustain a competitive advantage. Therefore, striving to be a learning organization is one way that companies can survive and compete effectively in complex business environments. In order to become a learning organization then, a company must develop its learning capabilities. Since leaders drive performance and the strategic decisions in an organization, the style of leadership that they adopt to foster learning and develop an organization's capability to learn is an important consideration.

This thesis has argued and suggested that a transformational leadership style can support each of the five building blocks to an organization's learning capabilities. By *articulating a clear vision*, these leaders can emphasize learning and make it the focus of an organization's future planning. Through *shared leadership*, transformational leaders would suspend their need for control and empower their employees to take responsibility and act. They could achieve this by providing employees with feedback, providing them with opportunities to raise concerns as well as developing channels of open communications. Both transformational and transactional leaders, together, could possibly influence the three remaining buildings blocks of an organization's learning capabilities. Both could facilitate an

experimental culture by encouraging and rewarding new ideas for innovation and change, creative solutions and preemptive problem solving. Likewise, transformational and transactional leaders could also facilitate *knowledge transfer* and *teamwork* by valuing all opportunities to learn regardless of the outcomes and by encouraging collaborative efforts as well as the sharing of information across organizational boundaries. As suggested by the results of this study, both leadership styles have an impact on the development of an organization's learning capabilities. A discussion of the results and their suggested implications is subsequently provided.

In Hypothesis 1, support was found for a relationship between leadership and the development of an organization's learning capabilities. Transformational and transactional leaders were both found to individually impact learning. This finding suggests that, in times of change, if (transformational) leaders provide their followers with a clear vision and a model for how to achieve that vision, specify high performance standards, force employees to suspend their individual self-interest, as well as support the employee's individual needs and encourage them to innovate, challenge traditional thinking and creatively problem solve, the more likely the organization is to make continuous learning a priority and develop learning capabilities. The influence of transactional leaders on learning, a largely understudied area, was also supported in our findings. Therefore, it can be suggested that transactional leaders can influence learning by clarifying expectations and rewarding employees for meeting the desired standards of performance. They encourage employees to take advantage of existing knowledge that has been refined as well as establish a sense of stability, reliability and consistency that facilitates learning. These leaders also reward intelligent failures and possibly further facilitate an organizational culture where all types of learning are encouraged. It is not surprising that leaders influence learning because ultimately they are the key decision makers in the organization and are central contributors to organizational effectiveness.

Although the findings suggest the individual influence of each leadership style on learning, additional analyses revealed a caveat that warrants discussion. Even though transformational leadership is more positively related to an organization's learning capabilities than transactional leadership, when a leader embodied both styles, the former

impacted learning while the latter did not. This can be rationalized by the fact that transformational leaders are more involved in the work lives of their followers than transactional leaders. As such, they are also more likely to foster the five building blocks of an organization's learning capabilities. Because of their leadership style, transformational leaders are more likely to influence the day-to-day activities of an employee compared to a transactional leader that may re-assess an employee's rewards and performance expectations a few times a year. The constant involvement and encouragement transformational leaders provide to innovate, preemptively problem solve, experiment and think outside the box are all likely drivers that push an organization to continuously learn, adapt and develop capabilities that ensure its survival in turbulent business conditions.

The supplementary analyses of Hypothesis 1 by sector also revealed some interesting findings. Findings from the private sector were similar to that of the overall results discussed in Hypothesis 1. In the public sector, however, our results suggested that respondents might prefer a transformational leader in order to facilitate learning. Given the highly bureaucratic nature of the public sector and the abundance of policies and procedures that must be adhered, it is likely that employees have a fairly clear understanding of what is expected of them, how their work contributes to the overall vision of their department as well as how they will be compensated. A transformational leader, then, is understandably preferred because they can "broaden and elevate followers' goals and provide them with confidence to perform beyond the expectations specified in the implicit or explicit exchange agreement" (Dvir et al 2002). These actions in turn contribute to learning. Transformational leaders in the public sector could foster learning by encouraging teamwork and collaboration among cross-functional teams. They could also further learning by taking each employee's individual need for growth and development into consideration and bringing them in line with the goals or vision for the organization.

Likewise, the likely preference for a transactional leader to facilitate learning in the health care sector is yet another interesting finding that can be suggested from our results. Given the stringent educational training nurses experience, the highly independent nature of their jobs and the potential for them to work on multiple units within a hospital, reporting to multiple unit managers, the preference for a transactional leader is understandable. These

leaders would set and clarify expectations for performance and compensation and would interfere little in nurses' day-to-day duties. Since nurses are highly trained and protocol regarding how to deal with patients changes little, a transformational leader might be perceived as micromanaging and disrupt efficiency. Having a transformational leader on each unit team would also be frustrating if the nurse had to change their behaviour based on nuance changes in policy for each team that they worked on. Also, given that nurses believe that they are underpaid and overworked, a leader that can more clearly outline their expectations and subsequent compensation would be preferred. The importance of reward and recognition to support learning was outlined by Yeo (2003). It can be suggested then that leaders in a health care setting must provide nurses with clear performance expectations as well as be fair and transparent in the distribution of rewards and punishment. As a result, frequent performance reviews may be important in such situations.

In addition, our findings could also provide support for the possibility that learning occurs least in organizations that are higher in formalization. This would support the findings by Goh and Richards (1997) and Mohrman and Mohrman Jr (1995). In this study, it could be suggested that learning was most likely to occur in the health care sector, followed by the private sector and not as evident in the public sector.

According to other findings from this study, supervisors were suggested to engender trust in their employees by involving them in key decision making processes, encouraging them to voice their concerns as well as by being transparent and fair with them in the distribution of rewards and punishment (procedural and distributive justice). By transformational leaders directing employees to achieve a shared vision, giving them a creative outlet and voice to air grievances as well as considering their individual needs, the employees feel both valued and cared for and resultantly begin to trust their supervisor. Similarly, it can be suggested that transactional leaders foster trust by offering consistent reward, outlining expectations that may be unclear in times of change and by providing a sense of stability. Trust in one's supervisor is important because without it an employee is less likely to invest as much effort into the organization and the initiatives it is trying to pursue.

For example, our findings also posit the importance of trust for learning. Firstly, the more an employee believes that their supervisor possesses ability on a task, integrity and benevolence, the antecedents of trust, the more likely they are to in fact trust them. Trust can then possibly be linked to learning, because it is when an employee trusts their supervisor that they are more likely willing to innovate, create, experiment, push boundaries, and share the results of their learning regardless of the outcome. By engaging in all of these behaviours, the employee is vulnerable and trusting that their supervisor will value all of their efforts to learn, without punish or rebuke for failure. Supervisors must demonstrate beforehand that they can be trustworthy. It is only then that an employee is able to comfortably engage in initiatives that facilitate learning. Without supervisor trust, learning is less likely to occur because employees are less free with information and unlikely to share it with team members, less likely to innovate and experiment and less likely to perceive their supervisors efforts at shared leadership as genuine. This possibly makes organizations less likely to be continuous learners, proactive problem solvers and anticipate the need for change as well as decreases their ability to be adaptable. The development of an organization's learning capabilities is therefore hindered.

Surprisingly, supervisor trust was also found to fully mediate the relationship between leadership and an organization's learning capability. This finding though uncommon in social science research provides some interesting insight into the facilitating conditions of a learning organization. Results from this study suggest that, regardless of leadership style, trust in one's supervisor is a primary contributor to an organization's learning capability. Such a finding makes intuitive sense because despite the fact that a leader may have a clear vision and encourage their followers to strive toward it or clearly outline expectations for them and provide a sense of stability and reliability in times of change, if an employee does not trust their supervisor they are less likely to go over and above what is expected and support the tenets of a learning organization. Similar to a high reliability organization where trust is high and employees are encouraged to experiment, innovate, preemptively problem solve and report on their work regardless of whether the outcomes are successful or not, trust is likely central to the development of a learning organization. Learning organizations place continuously learning and adaptation and revision of policies and procedures at the forefront. To do this effectively, employees need to trust

that they have their supervisor's support (regardless of whether they are transformational or transactional) to experiment, transfer knowledge (both successes and failure) as well as engage in teamwork without blame or rebuke. Essentially, our results suggest that high levels of trust provide the best conditions for an environment where innovation can flourish because all outcomes are looked at as opportunities to learn from. Without trust as mentioned earlier, the potential for an organization to fully develop its learning capabilities is hindered.

The central role of trust in this study can also be understood given the changing nature of business and the turbulent business environments that organizations currently face. Organizations are flatter today compared to the traditional organizational hierarchies. Employees more often work on a team as equals and are highly interdependent. With the rise of globalization, the nature of work has changed as well. There is an increase in multinational teams, virtual workers and flexible work schedules. All of these factors may culminate to render the traditional command, control and monitoring styles of a leader less appropriate when facilitating learning. This new environment that businesses function in requires flexibility, collaboration and a mechanism that is capable of adapting to the changing nature of work and flatter organizational structures. Given all of this uncertainty and complexity in business, it can be argued then that trust serves as an alternate control mechanism and contributes ultimately to an organization's stability. Williams (2001) supports this premise by arguing that trust between management and their employees' reinforces an organization's ability to maintain its competitive advantage. Therefore, trust can be thought of as a consistent mechanism, regardless of leadership style, to support organizational change and development.

The importance of trust for knowledge creation, sharing and inevitably learning has already been discussed. However, trust can also be linked to a number of outcomes that contribute to learning. In business today, resources are limited and need to be used efficiently in order to survive. Trust therefore has been found to influence an employee's affective commitment, cynicism towards change and intentions to leave the organization (Albrecht & Travaglione 2003; Connell et al 2003). As a result, practitioners and human resource managers should assist management to develop trusting relationships with their employees if they are to retain their talented workforce, brace them for change and get them to contribute

to organizational learning. Trust as proposed by Burke et al (2007) also facilitates employee behaviours that are not prescribed by their job description but still benefit the organization, organizational citizenship behaviours. This notion is supported in findings by (Pillai et al 1999; Dirk & Ferrin 2002). It is possible that trust in one's leader creates a sense of obligation for the employee to contribute to the organization in some way. Therefore, these discretionary behaviours that go above and beyond one's job could also be argued to contribute to learning if preemptive problem solving or experimentation was enacted.

This thesis has had a number of implications for both research and practice. Its central contribution is in highlighting the importance of trust in one's supervisor, particularly in the context of learning.

Findings from this study suggest that trust between an employee and their leader can develop in the following ways:

Table 15: Practice Implications - Trust

| Recommendations for Building Trust |
|---|
| <ul style="list-style-type: none"> - Giving employees the opportunity to question processes and voice concerns; open communication (e.g. setting aside time at team meetings to discuss employee concerns) - Seeking their input in the development of key decision making processes (e.g. include employees in meetings/discussions about the vision for the company) - Providing clear direction and a clear line of sight between their contributions and vision of the organization (e.g. at the start of every project/ deliverable review performance expectations and provide detailed feedback once complete) - Clearly, fairly and transparently outlining and distributing rewards for performance (e.g. ensure employees know their performance/reward expectations as well as make known how they can escalate grievances if necessary) - Freely encouraging and providing opportunities for experimentation/innovation. Allowing for the sharing of the results, regardless of the outcome; encourage a no blame culture (e.g. recognize/reward these efforts with incentives like "employee of the month" and "gift cards"). This results in employee empowerment. - Demonstrating concern and support for each employees' individual growth needs (e.g. allow employees to suggest training and skill building opportunities, career path objectives, set aside money for each employee in a training budget) - Consistent and reliable behaviour (e.g. always acts in accordance with what has been conveyed verbally, in writing, or in a contract) |

The importance of giving employees the opportunity to question company processes as well as seek their feedback in the making of decisions when trying to achieve and

implement change in an organization are most notable in the works of Mary Parker Follett (1926) in the “The Giving of Orders” and in the famous Hawthorne studies by Elton Mayo at Western Electric (Roethlisberger 1941). Both theorists essentially give full consideration to the complex individual and believe that gains can be had if employees are given adequate care and consideration. In order to achieve change, Follett (1926) argues that leaders must not appeal to their employees’ sense of logic and reason, as they are hindered by their habitual patterns and attitudes. Instead, she suggests that one must “build up certain attitudes, provide the release for these attitudes, and augment the released response as it is being carried out.” This is in line with our recommendations to build trust. By allowing employees the opportunity for open communication, providing them with release for their concerns and following up with them and giving importance to the process, leaders likely build trust and resultantly facilitate change. Similarly, the importance of demonstrating concern for employees and soliciting their input was highlighted in the Hawthorne studies and found to not only increase productivity but employee satisfaction during the implementation of a change initiative (Roethlisberger 1941). This study underscored the benefits that could be garnered and the importance of involving employees in the decision making process. By giving employees a clear line of sight as well as inclusion and transparency into a change venture, employees are more likely to trust in management and be satisfied in their roles. In sum, behaviours such as seeking employee feedback, soliciting their participation in decision-making processes as well as leaders providing transparency and a clear line of sight, and demonstrating concern for their employees are all important in the management of organizations. They inevitably create the conditions under which leaders can facilitate trust and realize change (Tolbert & Hall 2009).

Lastly, it is when this trust develops, regardless of leadership style, that an organization’s capability to learn is fully reached. As a consequence, as previously discussed, employees are more likely to engage in experimentation, preemptive problem solving, engage in team work as well as share their knowledge so that it can be institutionalized and then used to improve organization processes and therefore learning.

Interestingly, findings from this study also raise awareness to the importance of transactional leaders as contributors to learning. This is yet another central contribution of

this thesis that has implications for practice. Considering the context of this study, its cross sectional nature and sample size, findings suggest that transactional leaders facilitate learning best in the healthcare and private sectors. Therefore, it can be suggested that organizations operating in these sectors should instill in their leaders the importance of setting clear expectations and clearly outlining rewards for performance (e.g. regular performance evaluations). This differs from the public sector and again the private sector where transformational leaders are suggested to more effectively foster learning. These leaders would articulate a clear new vision and attempt to have all employees motivated to achieving it (e.g. intellectual stimulation, training courses). Therefore, being cognizant of sectoral differences, different leadership styles are important for learning, something that hasn't been considered in the literature.

8. STUDY LIMITATIONS & FUTURE RESEARCH

Despite the unique contributions of this study and its suggested practical implications, a few study limitations should be acknowledged. From the beginning, getting organizations to participate in the data collection process was a challenge. Several organizations declined or backed out of participation either because they could not justify having employees complete the 15 minute survey on company time or because they felt that the constructs being measured were too sensitive to the organization. This may even explain why 21 participants that began the survey did not complete it. Given these concerns, the first limitation of this study is sampling. Despite additional analyses by sector to garner richer results, since 60% of respondents indicated being in the private sector, this limits the generalizability of study results. Therefore, it is possible that employees in the public and health care sectors respond differently from employees in the private sector. Replication of this study in future research, with a wider sample, more evenly distributed across sector would be beneficial to confirming our results.

In addition, since all data were drawn from employee surveys, there is a risk of common method variance biases. There is some literature to support that correlations between variables measured with the same method can be overinflated (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Future studies could additionally examine the studied relationships with a qualitative interview method. Having multiple methods to collect results would also reduce the potential for fatigue when participants are responding to a survey. Galesic & Bosnjack (2009) examine the effects of survey length and resultant changes in response patterns while Cape (2005) supports the consequences of survey fatigue such as less attention on a task and satisfying when making responses.

Finally, because an organization's ability to learn should be an ongoing activity, future studies should not only consider research designs that are qualitative but longitudinal as well. The cross sectional nature of data may not have captured the full extent of an organization's capability to learn, since responses from only one time period were examined. A longitudinal study would more appropriately examine how leaders influence learning over a longer period of time and maybe more realistically capture the nuances of a turbulent business environment. Simply, the role of transformational leaders during the initial, chaotic

and stressful phases of change and transactional leaders in the implementation and stability phases towards the end of change could more clearly be examined in a study with a temporal component. These studies would lend further support to one of the main contributions of this study, the importance of studying the influence of both transformational and transactional leadership with regards to learning. Additional research studying the combined impact of both leadership styles is also needed in order to bolster and more clearly define an emerging construct in the literature known as ambidextrous leadership.

Despite support being garnered for the proposed hypotheses in this study, one cannot claim support for a causal relationship between the studied variables. Regression analyses demonstrate that the variables of interest in the study are associated with the dependent variable, but it cannot be specified that an independent variable caused an effect on the dependent variable. To test for a causal relationship, either path modeling or structural equation modeling must be utilized. Structural equation modeling is most commonly used to estimate and test causal relations. This statistical technique also makes use of confirmatory and exploratory modeling as part of its analysis. Future research could also use this methodology to further substantiate the results found here.

Since learning organizations have been found to demonstrate strong financial performance, additional studies exploring a possible link with employee engagement, job satisfaction and commitment could also be explored.

Future research could also build and expand on the framework presented in this thesis to further examine the conditions that contribute to the development of a learning organization. Given the major influence of supervisor trust in this study, future research could, first, explore whether these results can be replicated. This would be important to determine whether trust in one's supervisor is a foundational element of a learning organization, like a flat organizational design and the renewal of employees' skills and competencies. To explore the robust construct of trust, additional studies could examine the role of organizational trust in the context of leadership and learning. It is possible that supervisor trust is important for learning when an employee is relatively new to an organization. As they begin to establish themselves in the organization, perhaps trust in the organization becomes more relevant for learning, especially if they have been promoted or

advanced in the company. Trust could additionally be examined in the context of team building. Given the flatter, team based organizational structure of many companies this level of analysis would not only be appropriate but extremely valuable.

In sum, in spite of some study limitations, this study adds value to the learning organization literature and allows for future research to build on these findings.

9. CONCLUSION

This exploratory study has attempted to add to the growing body of literature on learning organizations. First, it aimed to suggest how organizations can strive to develop continuous learning capabilities by examining the two most commonly studied styles of leadership in the context of learning. Few studies in the literature have specified the individual and differential roles of transformational and transactional leadership on learning. Most studies as previously noted emphasize the role of a transformational leader and either downplay or ignore transactional leadership. The mediating role of trust on the relationship between leadership and learning has also not been previously examined. This study is important because it provides some new insights and has potential practical implications for managers as well.

By addressing these two research gaps, this study adds further insight to the learning organization literature. Practically, our findings suggest that overall, organizations would benefit from encouraging their leaders to adopt both leadership styles in order to foster learning. More influential than leadership, across all the industries included in this study however, was the suggested role of supervisor trust. Regardless of sampling in the public, private or healthcare sector, if an employee did not trust their leader, learning was least likely to occur. This insight is interesting and extremely valuable. Therefore, in order for an organization to sustain a competitive advantage and be successful in these turbulent economic times and ever changing business environments, a leader developing a trusting relationship with their employee is beneficial. It is only when this trust develops that employees are likely to invest and engage in behaviours that promote learning. Simply, when a leader demonstrates ability, benevolence and integrity through fairness, employees are more likely to make themselves vulnerable in the relationship and engage in creative and innovate thinking that pushes boundaries. They are also more likely to share the results of their experimentation regardless of the outcome because they believe that all experiences are valued and considered opportunities to learn. A leader's articulation of a shared vision, propensity to get employees to challenge traditional thinking as well as set and clarify clear expectations of performance and reward are all secondary to the development of trust, in order to cultivate and reap the benefits of continuous learning in an organization.

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APPENDIX A: Invitation to Participate



Wednesday, October 19th 2011

Hello,

My name is Ira Grover, I am a Graduate student at the University of Ottawa working with Prof. Swee C. Goh. I am currently in my second year at the Telfer School of Management completing my Masters of Science in Management (MSc). As part of the program requirements, it is my responsibility to produce and defend a thesis in a desired area of interest.

I am contacting you today to first provide you with an overview of my research interest as well as extend to you a request for your organizations to participate in my study.

As an organization, I am sure you realize the importance of learning and keeping abreast with the changes that impact your business. The purpose of my study then is to examine how leaders influence factors that contribute to learning such as knowledge transfer in an organization as well as a culture of experimentation.

Furthermore, in my research, I argue that leaders with both a Transformational and Transactional leadership orientation can influence an organization's learning capability. This is an important perspective since previous work in the area has primarily implicated the transformational leadership style as contributing to learning. These leaders are charged with the responsibility of providing direction and purpose through a shared mission and vision, provide individual consideration for each employee and encourage them to reach above and beyond their needs to contribute to the wellbeing of the organization. As part of my thesis, I argue that the largely understudied concept of transactional leadership can also serve to facilitate learning and its contributions should not be discounted. A leader with a

transactional orientation would provide consistency by clarifying expectations and by offering consistent rewards for meeting the desired level of performance. This sense of consistency leads to reliability in the leader which is important in times of continuous change and to encourage continued learning. Simply, by encouraging employees to learn and offering them concrete and consistent rewards to do so will foster learning.

Given that learning and the sharing of new information and experimentation can be perceived as risky because employees are afraid of failure and being rebuked by their organization. This study also examines whether trust in one's leader (immediate supervisor) to value both positive and negative outcomes of learning and treat intelligent failures as valuable opportunities to learn will encourage an employee to innovate further, share their experiences and ultimately contribute further to learning.

In order to carry out my research, I will be conducting a field study and soliciting the opinions of a number of employees over several organizations in various industries. To ensure the best results, I need to derive a sample of employees from a diverse number of organizations and gather first-hand their perceptions of their leader's attributes, trust and organization's capability to learn. With that being said, I would like to request for your organization to participate in my study. If you consent, a number of employees in your organizations will be asked to complete a short online survey. Please be rest assured that all of the information you provide will be kept completely confidential and each respondent will remain anonymous.

To answer some potential questions you may have, I have provided a few responses to some frequently asked questions. Should you have any additional questions, please feel free to contact me at any time.

- *What is the purpose of this study?* The aim of my thesis is to study how a leader influences a learning organization and learning capabilities. The potential role of trust as fostered by the leader and its impacts on learning will also be studied.
- *What does it mean to participate?* If you choose to participate, you will be given a short online survey to complete. The survey will take no longer than 15 minutes to complete.

- *I have concerns about confidentiality.* I can assure you that all the data gathered from the survey will be kept confidential and respondents will not be identified. The only two people with access to the data will be myself, the researcher and Prof. Swee Goh, my supervisor. In addition, all the survey materials and responses will be securely locked away in a cabinet in my office when they are not being analysed. In addition, all of the data you provide will be destroyed after 5 years. This is in keeping with the guidelines of research outlined by the University of Ottawa.
- *What are the benefits of my participation?* Given that organizations going through change tend to emphasize a transformational leadership style-one that emphasizes a strong mission and vision, and setting of appropriate guidelines and models, I hope that the results of my study will provide you with insights regarding the differential effects of different styles of leadership on learning (i.e. transactional leadership), and how both can be beneficial. Once I have collected and analyzed all of the data, I will write a research paper or report. I will be pleased to share this information with you if you wish.

Thank you for your time, and I look forward to hearing back from you soon.

Best Regards,

Ira Ann. Grover

MSc. Management Candidate

APPENDIX B: Employee Consent Form



Hello,

My name is Ira Grover, I am a Graduate student at the University of Ottawa working with Prof. Swee C. Goh. I am currently in my second year at the Telfer School of Management completing my Masters of Science in Management (MSc).

My thesis is in the area of Organizational Behaviour and the purpose of the survey is to measure the influence that factors, such as leadership and trust, have on an organization's learning capability. The survey will take approximately 15 minutes of your time to complete, after which no further participation will be required of you. Please note that you have *until Friday March 2nd 2012* to complete the survey, but once you start it, *you must complete it in the same session*. *Your responses will not be saved if you quit the survey before completing it.*

Please reflect before answering each question and make the selection that best represents how you feel, there are no "right" or "wrong" answers. You will be asked to make responses on a 5-point scale, ranging from "Strongly Disagree" to "Strongly Agree." Please be sure to complete **all** 63 questions on the survey. Even if some questions may sound the same, please complete all the questions.

During the analysis process, all the information will be kept in a secure manner (e.g. locked cabinet and a password protected computer), and will only be accessed by me, the principal investigator, and my thesis supervisor. All the data gathered as part of the survey will be conserved, in a secure manner, for five (5) years in keeping with the university's Ethics requirements and in accordance with the United States Patriotic Act.

All of the information gathered in this survey will remain confidential and your responses will be aggregated with the others, so individual respondents will not be identified. If you wish to withdraw your participation from the survey, at any time, please be assured that there will be no consequences for doing so.

After I have analysed the results, I will be providing your organization with the results of my study.

Thank you for taking the time to participate. To proceed to the study, please click the link below, read the introductory page and click « Next ». By doing so, **you are consenting your participation.**

Should you have questions or concerns at any time, please do not hesitate to contact me. Also, please be sure to keep a copy of this email, consenting your participation, for your records. Survey link: <https://www.surveymonkey.com/s/5PFF2DQ>

If you have any questions regarding the ethical conduct of this study, you may contact the Protocol Officer for Ethics in Research at the University of Ottawa.

Regards,

Ira Ann. Grover
MSc. Management Candidate

Professor. Swee. C Goh
Thesis Supervisor

APPENDIX C: THESIS SURVEY

Part 1 of 2

In the section below, you are requested to fill in some personal and demographic data. Please respond with a checkmark where appropriate or by filling in the blank.

1. Please indicate the sector or industry that your organization operates in:

Private _____

Public _____

Health Care _____

2. Please indicate approximately how long you have been with the company.

1-5 years _____

5-10 years _____

10-15 years _____

15-20 years _____

20 years+ _____

3. Do you manage or supervise any employees?

Yes _____

No _____

4. Please indicate your gender:

Female _____

Male _____

5. Please indicate your age bracket.

18-24 _____

25-34 _____

35-44 _____

45-54 _____

55-64 _____

65+ _____

6. Please indicate your highest level of completed education:

- High school or less
- College/CEGEP
- University
- Master's
- PhD or higher

| Part 2 of 2 | | For each of the survey items below, please respond by circling the number that best represents how you feel. This survey will take about 15 minutes to complete. Thank you for your participation. | | | | |
|---|------------------------|---|---|---|---------------------|--|
| | Strong Disagree (1) | | | | Strong Agree (5) | |
| 1. My leader has a clear understanding of where we are going. | 1 | 2 | 3 | 4 | 5 | |
| 2. My leader paints an interesting picture of the future for our group. | 1 | 2 | 3 | 4 | 5 | |
| 3. My leader is always seeking new opportunities for the organization. | 1 | 2 | 3 | 4 | 5 | |
| 4. My leader inspires others with his/her plans for the future. | 1 | 2 | 3 | 4 | 5 | |
| 5. My leader is able to get others committed to his/her dream. | 1 | 2 | 3 | 4 | 5 | |
| 6. My leader leads by "doing" rather than simply "telling." | 1 | 2 | 3 | 4 | 5 | |
| 7. My leader provides a good model for me to follow. | 1 | 2 | 3 | 4 | 5 | |
| 8. My leader leads by example. | 1 | 2 | 3 | 4 | 5 | |
| 9. My leader fosters collaboration among work groups. | 1 | 2 | 3 | 4 | 5 | |
| 10. My leader encourages employees to be "team players." | 1 | 2 | 3 | 4 | 5 | |
| 11. My leader gets the group to work together for the same goal. | 1 | 2 | 3 | 4 | 5 | |
| 12. My leader develops a team attitude and spirit among employees. | 1 | 2 | 3 | 4 | 5 | |
| 13. My leader shows us that he/she expects a lot from us. | 1 | 2 | 3 | 4 | 5 | |
| 14. My leader insists on only the best performance. | 1 | 2 | 3 | 4 | 5 | |
| 15. My leader will not settle for second best. | 1 | 2 | 3 | 4 | 5 | |
| 16. My leader acts without considering my feelings. | 1 | 2 | 3 | 4 | 5 | |
| 17. My leader shows respect for my personal feelings. | 1 | 2 | 3 | 4 | 5 | |

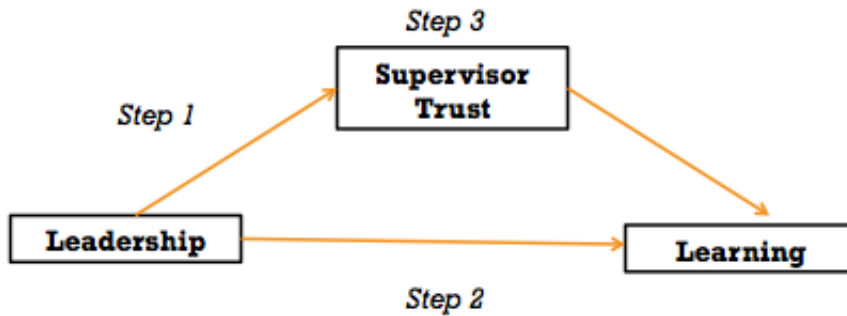
| | Strong Disagree (1) | | | | Strong Agree (5) |
|--|------------------------|---|---|---|---------------------|
| 18. My leader behaves in a manner thoughtful of my personal needs. | 1 | 2 | 3 | 4 | 5 |
| 19. My leader treats me without considering my personal feelings. | 1 | 2 | 3 | 4 | 5 |
| 20. My leader challenges me to think about old problems in new ways. | 1 | 2 | 3 | 4 | 5 |
| 21. My leader asks questions that prompt me to think. | 1 | 2 | 3 | 4 | 5 |
| 22. My leader has stimulated me to rethink the way I do things. | 1 | 2 | 3 | 4 | 5 |
| 23. My leader has ideas that have challenged me to reexamine some of the basic assumptions about my work. | 1 | 2 | 3 | 4 | 5 |
| 24. My leader always gives me positive feedback when I perform well. | 1 | 2 | 3 | 4 | 5 |
| 25. My leader gives me special recognition when my work is very good. | 1 | 2 | 3 | 4 | 5 |
| 26. My leader commends me when I do a better than average job. | 1 | 2 | 3 | 4 | 5 |
| 27. My leader personally compliments me when I do outstanding work. | 1 | 2 | 3 | 4 | 5 |
| 28. My leader frequently does not acknowledge my good performance. | 1 | 2 | 3 | 4 | 5 |
| 29. There is widespread support and acceptance of the organization's mission statement. | 1 | 2 | 3 | 4 | 5 |
| 30. I do not understand how the mission of the organization is to be achieved. | 1 | 2 | 3 | 4 | 5 |
| 31. The organization's mission statement identifies values to which all employees must conform. | 1 | 2 | 3 | 4 | 5 |
| 32. We have opportunities for self-assessment with respect to goal attainment. | 1 | 2 | 3 | 4 | 5 |
| 33. Senior managers in this organization resist change and are afraid of new ideas. | 1 | 2 | 3 | 4 | 5 |
| 34. Senior managers and employees in this organization share a common vision of what our work should accomplish. | 1 | 2 | 3 | 4 | 5 |
| 35. Managers in this organization can accept criticism without becoming overly defensive. | 1 | 2 | 3 | 4 | 5 |

| | Strong Disagree (1) | 2 | 3 | 4 | Strong Agree (5) |
|--|------------------------|---|---|---|---------------------|
| 36. Managers in this organization often provide useful feedback that helps to identify potential problems and opportunities. | 1 | 2 | 3 | 4 | 5 |
| 37. Managers in this organization frequently involve employees in important decisions. | 1 | 2 | 3 | 4 | 5 |
| 38. I can often bring new ideas into the organization. | 1 | 2 | 3 | 4 | 5 |
| 39. From my experience, people who are new in this organization are encouraged to question the way things are done. | 1 | 2 | 3 | 4 | 5 |
| 40. Managers in this organization encourage team members to experiment in order to improve work processes. | 1 | 2 | 3 | 4 | 5 |
| 41. Innovative ideas that work are often rewarded by management. | 1 | 2 | 3 | 4 | 5 |
| 42. In my experience, new ideas from employees are not treated seriously by management. | 1 | 2 | 3 | 4 | 5 |
| 43. I often have an opportunity to talk to other staff about successful programs or work activities in order to understand why they succeed. | 1 | 2 | 3 | 4 | 5 |
| 44. Failures are seldom constructively discussed in our organization. | 1 | 2 | 3 | 4 | 5 |
| 45. New work processes that may be useful to the organization as a whole are usually shared with all employees. | 1 | 2 | 3 | 4 | 5 |
| 46. We have a system that allows us to learn successful practices from other organizations. | 1 | 2 | 3 | 4 | 5 |
| 47. Current organizational practice encourages employees to solve problems together before discussing them with a manager. | 1 | 2 | 3 | 4 | 5 |
| 48. We cannot usually form informal groups to solve organizational problems. | 1 | 2 | 3 | 4 | 5 |
| 49. Most problem solving groups in this organization feature employees from a variety of functional areas. | 1 | 2 | 3 | 4 | 5 |
| 50. I am not sure if I fully trust my supervisor. | 1 | 2 | 3 | 4 | 5 |
| 51. My supervisor is open and upfront with me. | 1 | 2 | 3 | 4 | 5 |
| 52. I believe that my supervisor has high integrity. | 1 | 2 | 3 | 4 | 5 |
| 53. In general, I believe my supervisor's motives and | 1 | 2 | 3 | 4 | 5 |

| intentions are good. | | | | | |
|---|------------------------|---|---------------------|---|---|
| | Strong Disagree (1) | | Strong Agree (5) | | |
| 54. My supervisor is not always honest and truthful. | 1 | 2 | 3 | 4 | 5 |
| 55. I don't think my supervisor treats me fairly. | 1 | 2 | 3 | 4 | 5 |
| 56. I can expect my supervisor to treat me in a consistent and predictable fashion. | 1 | 2 | 3 | 4 | 5 |
| 57. I am not sure if I fully trust my organization. | 1 | 2 | 3 | 4 | 5 |
| 58. My organization is open and upfront with me. | 1 | 2 | 3 | 4 | 5 |
| 59. I believe that my organization has high integrity. | 1 | 2 | 3 | 4 | 5 |
| 60. In general, I believe my organization's motives and intentions are good. | 1 | 2 | 3 | 4 | 5 |
| 61. My organization is not always honest and truthful. | 1 | 2 | 3 | 4 | 5 |
| 62. I don't think my organization treats me fairly. | 1 | 2 | 3 | 4 | 5 |
| 63. I can expect my organization to treat me in a consistent and predictable fashion. | 1 | 2 | 3 | 4 | 5 |

Thank you for participating, the survey is now complete.

APPENDIX D: SPSS OUTPUT FOR MEDIATION TESTING



In order to evaluate the mediating role of trust on the relationship between leadership and learning, Baron and Kenney's (1986) research criteria were used. They suggested that three regression analyses had to be estimated. The steps outlined below were analysed via regression analyses with SPSS.

To establish full mediation:

- **Step 1:** The predictor variables (transformational and transactional leadership) must first be related to the mediator variable, trust.
- **Step 2:** Next, the predictor variables must be related to the criterion variable, learning capabilities.
- **Step 3:** Finally, when regressing the criterion on both the mediator and the predictor variables, the mediator must be significant while the predictor becomes non- significant.

Step 1: Transformational Leadership & Supervisor Trust

Descriptive Statistics

| | Mean | Std. Deviation | N |
|--|--------|----------------|-----|
| SupTrustAgg | 4.0000 | .79776 | 180 |
| TransfAgg | 3.7935 | .62266 | 180 |
| Please indicate the sector or industry that your organization operates in: | 1.3056 | .81259 | 180 |
| Please indicate approximately how long you have been with the company. | 2.0833 | 1.36956 | 180 |
| Do you manage or supervise any employees? | 1.5167 | .50112 | 180 |
| Please indicate your gender: | 1.5111 | .50127 | 180 |
| Please indicate your age bracket. | 2.9778 | 1.19101 | 180 |
| Please indicate your highest level of completed education: | 3.1556 | .81756 | 180 |

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .813 ^a | .661 | .647 | .47378 | .661 | 47.930 | 7 | 172 | .000 |

- a. Predictors: (Constant), Please indicate your highest level of completed education:
 , Please indicate the sector or industry that your organization operates in:
 , Please indicate your age bracket., TransfAgg, Do you manage or supervise any employees?
 , Please indicate your gender:
 , Please indicate approximately how long you have been with the company.
 b. Dependent Variable: SupTrustAgg

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 75.310 | 7 | 10.759 | 47.930 | .000 ^a |
| | Residual | 38.608 | 172 | .224 | | |
| | Total | 113.918 | 179 | | | |

- a. Predictors: (Constant), Please indicate your highest level of completed education:
 , Please indicate the sector or industry that your organization operates in:
 , Please indicate your age bracket., TransfAgg, Do you manage or supervise any employees?
 , Please indicate your gender:
 , Please indicate approximately how long you have been with the company.
 b. Dependent Variable: SupTrustAgg

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------|--|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | -.209 | .331 | | -.633 | .528 | | |
| | TransfAgg | 1.010 | .058 | .788 | 17.284 | .000 | .947 | 1.055 |
| | Please indicate the sector or industry that your organization operates in: | -.053 | .050 | -.054 | -1.068 | .287 | .759 | 1.317 |
| | Please indicate approximately how long you have been with the company. | .006 | .032 | .010 | .187 | .852 | .646 | 1.547 |
| | Do you manage or supervise any employees? | .115 | .074 | .072 | 1.556 | .122 | .920 | 1.087 |
| | Please indicate your gender: | .018 | .081 | .011 | .224 | .823 | .768 | 1.302 |
| | Please indicate your age bracket. | .024 | .037 | .036 | .657 | .512 | .658 | 1.519 |
| | Please indicate your highest level of completed education: | .052 | .045 | .053 | 1.147 | .253 | .929 | 1.077 |

a. Dependent Variable: SupTrustAgg

Step 1: Transactional Leadership & Supervisor Trust

Descriptive Statistics

| | Mean | Std. Deviation | N |
|--|--------|----------------|-----|
| SupTrustAgg | 4.0000 | .79776 | 180 |
| TransAgg | 3.6411 | .82819 | 180 |
| Please indicate the sector or industry that your organization operates in: | 1.3056 | .81259 | 180 |
| Please indicate approximately how long you have been with the company. | 2.0833 | 1.36956 | 180 |
| Do you manage or supervise any employees? | 1.5167 | .50112 | 180 |
| Please indicate your gender: | 1.5111 | .50127 | 180 |
| Please indicate your age bracket. | 2.9778 | 1.19101 | 180 |
| Please indicate your highest level of completed education: | 3.1556 | .81756 | 180 |

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .629 ^a | .396 | .371 | .63273 | .396 | 16.078 | 7 | 172 | .000 |

- a. Predictors: (Constant), Please indicate your highest level of completed education:
 , Please indicate the sector or industry that your organization operates in:
 , Please indicate your age bracket., TransAgg, Do you manage or supervise any employees?

 , Please indicate your gender:
 , Please indicate approximately how long you have been with the company.
 b. Dependent Variable: SupTrustAgg

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 45.058 | 7 | 6.437 | 16.078 | .000 ^a |
| | Residual | 68.860 | 172 | .400 | | |
| | Total | 113.918 | 179 | | | |

- a. Predictors: (Constant), Please indicate your highest level of completed education:
 , Please indicate the sector or industry that your organization operates in:
 , Please indicate your age bracket., TransAgg, Do you manage or supervise any employees?

 , Please indicate your gender:
 , Please indicate approximately how long you have been with the company.
 b. Dependent Variable: SupTrustAgg

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------|--|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 1.457 | .398 | | 3.663 | .000 | | |
| | TransAgg | .572 | .060 | .594 | 9.588 | .000 | .917 | 1.091 |
| | Please indicate the sector or industry that your organization operates in: | -.103 | .067 | -.105 | -1.555 | .122 | .765 | 1.307 |
| | Please indicate approximately how long you have been with the company. | .014 | .043 | .024 | .331 | .741 | .644 | 1.554 |
| | Do you manage or supervise any employees? | .084 | .100 | .053 | .841 | .402 | .885 | 1.130 |
| | Please indicate your gender: | -.035 | .107 | -.022 | -.322 | .748 | .770 | 1.298 |
| | Please indicate your age bracket. | .027 | .049 | .040 | .548 | .585 | .657 | 1.521 |
| | Please indicate your highest level of completed education: | .130 | .060 | .133 | 2.175 | .031 | .938 | 1.067 |

- a. Dependent Variable: SupTrustAgg

Step 2: Transformational Leadership & Learning Capabilities

Descriptive Statistics

| | Mean | Std. Deviation | N |
|--|--------|----------------|-----|
| LOAgg | 3.5021 | .50797 | 180 |
| TransfAgg | 3.7935 | .62266 | 180 |
| Please indicate the sector or industry that your organization operates in: | 1.3056 | .81259 | 180 |
| Please indicate approximately how long you have been with the company. | 2.0833 | 1.36956 | 180 |
| Do you manage or supervise any employees? | 1.5167 | .50112 | 180 |
| Please indicate your gender: | 1.5111 | .50127 | 180 |
| Please indicate your age bracket. | 2.9778 | 1.19101 | 180 |
| Please indicate your highest level of completed education: | 3.1556 | .81756 | 180 |

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .578 ^a | .334 | .307 | .42286 | .334 | 12.329 | 7 | 172 | .000 |

a. Predictors: (Constant), Please indicate your highest level of completed education:
 , Please indicate the sector or industry that your organization operates in:
 , Please indicate your age bracket., TransfAgg, Do you manage or supervise any employees?
 , Please indicate your gender:
 , Please indicate approximately how long you have been with the company.

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 15.432 | 7 | 2.205 | 12.329 | .000 ^a |
| | Residual | 30.756 | 172 | .179 | | |
| | Total | 46.187 | 179 | | | |

a. Predictors: (Constant), Please indicate your highest level of completed education:
, Please indicate the sector or industry that your organization operates in:
, Please indicate your age bracket., TransfAgg, Do you manage or supervise any employees?

, Please indicate your gender:
, Please indicate approximately how long you have been with the company.
b. Dependent Variable: LOAgg

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Correlations | | | Collinearity Statistics | |
|-------|--|-----------------------------|------------|---------------------------|--------|------|--------------|---------|-------|-------------------------|-------|
| | | B | Std. Error | Beta | | | Zero-order | Partial | Part | Tolerance | VIF |
| 1 | (Constant) | 1.624 | .295 | | 5.502 | .000 | | | | | |
| | TransfAgg | .426 | .052 | .523 | 8.178 | .000 | .531 | .529 | .509 | .947 | 1.055 |
| | Please indicate the sector or industry that your organization operates in: | -.045 | .045 | -.072 | -1.011 | .313 | -.132 | -.077 | -.063 | .759 | 1.317 |
| | Please indicate approximately how long you have been with the company. | -.022 | .029 | -.059 | -.767 | .444 | -.046 | -.058 | -.048 | .646 | 1.547 |
| | Do you manage or supervise any employees? | -.072 | .066 | -.071 | -1.096 | .275 | -.027 | -.083 | -.068 | .920 | 1.087 |
| | Please indicate your gender: | .020 | .072 | .020 | .282 | .778 | .062 | .022 | .018 | .768 | 1.302 |
| | Please indicate your age bracket. | .053 | .033 | .123 | 1.610 | .109 | .094 | .122 | .100 | .658 | 1.519 |
| | Please indicate your highest level of completed education: | .091 | .040 | .147 | 2.270 | .024 | .202 | .171 | .141 | .929 | 1.077 |

a. Dependent Variable: LOAgg

Step 2: Transactional Leadership & Learning Capabilities

Descriptive Statistics

| | Mean | Std. Deviation | N |
|--|--------|----------------|-----|
| LOAgg | 3.5021 | .50797 | 180 |
| TransAgg | 3.6411 | .82819 | 180 |
| Please indicate the sector or industry that your organization operates in: | 1.3056 | .81259 | 180 |
| Please indicate approximately how long you have been with the company. | 2.0833 | 1.36956 | 180 |
| Do you manage or supervise any employees? | 1.5167 | .50112 | 180 |
| Please indicate your gender: | 1.5111 | .50127 | 180 |
| Please indicate your age bracket. | 2.9778 | 1.19101 | 180 |
| Please indicate your highest level of completed education: | 3.1556 | .81756 | 180 |

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .456 ^a | .208 | .176 | .46124 | .208 | 6.443 | 7 | 172 | .000 |

a. Predictors: (Constant), Please indicate your highest level of completed education:
 , Please indicate the sector or industry that your organization operates in:
 , Please indicate your age bracket., TransAgg, Do you manage or supervise any employees?
 , Please indicate your gender:
 , Please indicate approximately how long you have been with the company.

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|-------|-------------------|
| 1 | Regression | 9.595 | 7 | 1.371 | 6.443 | .000 ^a |
| | Residual | 36.592 | 172 | .213 | | |
| | Total | 46.187 | 179 | | | |

a. Predictors: (Constant), Please indicate your highest level of completed education:
 , Please indicate the sector or industry that your organization operates in:
 , Please indicate your age bracket., TransAgg, Do you manage or supervise any employees?
 , Please indicate your gender:
 , Please indicate approximately how long you have been with the company.
 b. Dependent Variable: LOAgg

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Correlations | | | Collinearity Statistics | |
|-------|--|-----------------------------|------------|---------------------------|--------|------|--------------|---------|-------|-------------------------|-------|
| | | B | Std. Error | Beta | | | Zero-order | Partial | Part | Tolerance | VIF |
| 1 | (Constant) | 2.355 | .290 | | 8.118 | .000 | | | | | |
| | TransAgg | .233 | .043 | .380 | 5.364 | .000 | .360 | .379 | .364 | .917 | 1.091 |
| | Please indicate the sector or industry that your organization operates in: | -.067 | .049 | -.107 | -1.383 | .168 | -.132 | -.105 | -.094 | .765 | 1.307 |
| | Please indicate approximately how long you have been with the company. | -.019 | .031 | -.051 | -.605 | .546 | -.046 | -.046 | -.041 | .644 | 1.554 |
| | Do you manage or supervise any employees? | -.081 | .073 | -.080 | -1.111 | .268 | -.027 | -.084 | -.075 | .885 | 1.130 |
| | Please indicate your gender: | -.003 | .078 | -.003 | -.039 | .969 | .062 | -.003 | -.003 | .770 | 1.298 |
| | Please indicate your age bracket. | .054 | .036 | .127 | 1.521 | .130 | .094 | .115 | .103 | .657 | 1.521 |
| | Please indicate your highest level of completed education: | .124 | .044 | .200 | 2.851 | .005 | .202 | .212 | .193 | .938 | 1.067 |

a. Dependent Variable: LOAgg

Step 3: Full Mediation Result

Descriptive Statistics

| | Mean | Std. Deviation | N |
|--|--------|----------------|-----|
| LOAgg | 3.5021 | .50797 | 180 |
| SupTrustAgg | 4.0000 | .79776 | 180 |
| TransfAgg | 3.7935 | .62266 | 180 |
| TransAgg | 3.6411 | .82819 | 180 |
| Please indicate the sector or industry that your organization operates in: | 1.3056 | .81259 | 180 |
| Please indicate approximately how long you have been with the company. | 2.0833 | 1.36956 | 180 |
| Do you manage or supervise any employees? | 1.5167 | .50112 | 180 |
| Please indicate your gender: | 1.5111 | .50127 | 180 |
| Please indicate your age bracket. | 2.9778 | 1.19101 | 180 |
| Please indicate your highest level of completed education: | 3.1556 | .81756 | 180 |

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .640 ^a | .410 | .378 | .40054 | .410 | 13.099 | 9 | 170 | .000 |

- a. Predictors: (Constant), Please indicate your highest level of completed education:
 , Please indicate the sector or industry that your organization operates in:
 , Please indicate your age bracket., TransAgg, Do you manage or supervise any employees?
 , Please indicate your gender:
 , Please indicate approximately how long you have been with the company., SupTrustAgg, TransfAgg
 b. Dependent Variable: LOAgg

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 18.914 | 9 | 2.102 | 13.099 | .000 ^a |
| | Residual | 27.274 | 170 | .160 | | |
| | Total | 46.187 | 179 | | | |

- a. Predictors: (Constant), Please indicate your highest level of completed education:
 , Please indicate the sector or industry that your organization operates in:
 , Please indicate your age bracket., TransAgg, Do you manage or supervise any employees?
 , Please indicate your gender:
 , Please indicate approximately how long you have been with the company.,
 SupTrustAgg, TransfAgg
 b. Dependent Variable: LOAgg

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------|--|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 1.685 | .281 | | 6.003 | .000 | | |
| | SupTrustAgg | .299 | .066 | .470 | 4.565 | .000 | .327 | 3.056 |
| | TransfAgg | .121 | .087 | .149 | 1.399 | .163 | .308 | 3.245 |
| | TransAgg | .003 | .050 | .006 | .070 | .944 | .532 | 1.881 |
| | Please indicate the sector or industry that your organization operates in: | -.029 | .042 | -.047 | -.686 | .494 | .754 | 1.326 |
| | Please indicate approximately how long you have been with the company. | -.024 | .027 | -.064 | -.869 | .386 | .643 | 1.555 |
| | Do you manage or supervise any employees? | -.107 | .064 | -.106 | -1.683 | .094 | .879 | 1.138 |
| | Please indicate your gender: | .015 | .068 | .015 | .220 | .826 | .767 | 1.303 |
| | Please indicate your age bracket. | .045 | .031 | .106 | 1.461 | .146 | .656 | 1.525 |
| | Please indicate your highest level of completed education: | .076 | .038 | .122 | 1.978 | .049 | .912 | 1.096 |

- a. Dependent Variable: LOAgg