PRIMARY RESEARCH

The influence of transformational leadership and organizational culture on learning organization: A comparative analysis of the IT sector

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Abstract. The popularity of learning organization has motivated researchers and scholars to identify factors that influence the development of learning organization. They have identified transformational leadership and a generative and adaptive organizational culture as important factors that influence the development of learning organization. Yet, few studies have empirically examined the impact of transformational leadership and generative and adaptive culture on the development of learning organization. An exploratory research was conducted and data were collected through a survey questionnaire from the IT sector and a comparison was drawn between Nepal and India. 400 questionnaires were distributed in each country and the results indicated that transformational leadership and generative and adaptive cultures have a positive influence on the development of learning organization. Transforming to learning organization has become important in this era, hence organizational leaders should develop transformational leadership behaviors and organizations need to change their culture to promote learning.

Keywords: Learning organization, Transformational leadership, Organizational culture, IT sector, India and Nepal

INTRODUCTION
In the twenty-first century the strategy for growth and survival is learning organization as modern organizations are facing a dynamic and fast changing environment so have little choice but to adapt to the pace of change. Traditional management practices are no longer suitable to Learning Organizations which require new ways of thinking and doing work. Research suggests that learning organization is an important competency to be successful in the face of the present marketplace (Buhler, 2002; Davis & Daley, 2008; Korth, 2007). They further stress the importance of Learning Organization for improving organizational performance and maintaining a competitive advantage. There appears a consensus in the literature that organizational learning can help achieve sustained competitive advantage (Ghosh, 2004). As organizations are developing structures and systems that are more adaptive and responsive, researchers and practitioners are focusing their efforts to identify factors that influence the development of learning organization. Among various factors identified, leadership and organizational culture are considered as one of the important factors that
influence the development of learning organization. The success of a learning organization depends on leadership qualities and the presence of a strong culture (Lam, 2002; Edmondson, 2002; Pool, 2000; Hall, 2001). The objective of this article is highlighted as follows: 1) study the relationship between leadership style and learning organization; organizational culture and learning organization; 2) identify the key variables of transformational leadership and organizational culture that will predict learning organization; 3) study the difference in the development of learning organization between Nepal and India. To address these objectives the article has been organized as such: 1) literature review highlighting the role of transformational leadership and organizational culture; 2) method of study; 3) presentation and discussion of findings; 4) summary and implication for future research.

LITERATURE REVIEW
Leadership and Learning Organization
Leadership is an attribute of a person or a social process and involves influence and persuasion (Yuld, 2002). Leadership provides the vision and direction towards goal attainment. The leadership theories in the past (trait theories, behavioral theories, situational/contingency theories) considered leaders as heroes who made all the decisions. However, the present generation of workers requires a leadership which encourages participation and creativity. In this context, transactional and transformational leadership theories have gained popularity. Burns (1978) was the first to differentiate between these two kinds of leadership and Bass (1985) proposed the full range leadership theory and differentiated transactional and transformational leadership. Transactional leaders focus on incremental improvement through a transaction (reward/punishment) whereas transformational leaders raise the followers to a higher level by changing their attitudes, beliefs, values and needs. Various research studies have identified leadership as a critical factor to influence learning organization (Popper & Lipshitz, 2000; Gilley & Maycunich, 2000; Edmondson, 2002; Lam, 2002). Leaders provide a vision, create learning opportunities and thus enhance organizational learning. Research has focused on transformational leaders as they are visionary and encourage followers to perform beyond expectation. They are change agents and enable organizations to respond to change and cope with environmental uncertainties (Tichy & Ulrich, 1984; Tichy & Devanna, 1990). They focus on learning and encourage organizational members to learn by creating a climate to learn and emphasizing on learning by experience (Trautmann, Maher & Motley, 2007). Transformational leaders have the capacity to create and communicate a clear vision and create contexts where organizational learning can flourish (Popper & Lipshitz, 2000). Through a case study research of two Canadian hospitals (LeBrasseur, Whissell & Ojha, 2002) highlighted the importance of transformational leadership of the CEO to improve organizational effectiveness through organizational learning during organizational change. Lam & Pang (2003) concluded that the transformational leadership of the school principal was the most important factor, which enhanced organizational learning processes of the school. Amitay, Popper & Lipshitz, (2005) studied 44 community clinics of a healthcare organization in Israel and found a positive correlation between transformational leadership and organizational learning and concluded that to enhance organizational learning, organizations should develop transformational leaders. As team leaders, they have a profound influence on team member learning and the development of learning as a strategic resource within the team, and the organization (Bucic, Robinson & Ramburuth, 2010; Raes, Decuyper, Lismont, Van den Bossche, Kyndt, Demeyere & Dochy, 2012). At the individual level too transformational leaders (through idealized influence and individualized consideration) influence job-related learning (Loon, Mee Lim, Haeng Lee & Lian Tam, 2012). Through a survey research, similarly Singh (2008) identified that articulate vision and intellectual stimulation encouraged organizational learning by providing members a sense of direction and stimulating creativity. Researchers have also identified a positive relationship between organizational innovation and organizational performance and the relationship is mediated by organizational learning (Garcia-Morales, Matias-Reche & Hurtado-Torres, 2008; Hsiao & Chang 2011; García-Morales, Jiménez-Barrionuevo & Gutiérrez-Gutiérrez, 2012, Noruzi, Dalfard, Azhdari, Nazari-Shirkouhi & Rezazadeh, 2013; Mutahar, Rasli & Al-Ghazali, 2015). Based on the above literature review the following hypothesis has been specified:

H1: Transformational leadership has a significant and positive influence in building a learning organization.

Organizational Culture and Learning Organization
In organizations, culture refers to the mix of symbol, language, ideology, belief, ritual and myth, which is unique
to every organization (Pettigrew, 1979; Meek, 1988). Though various terminologies have been utilized by authors to conceptualize organizational culture, it is generally agreed that through culture purpose, commitment and order are generated in an organization and it is reflected in the beliefs and assumptions that are commonly held and shared by all members of the organization and which influence their behavior. Organizational culture has an impact on the performance of an organization but there are differing views in the literature regarding the relationship between organizational culture and performance of the organization. Some researchers consider a direct correlation between organizational culture and performance (Kilmann, 1985; Deal & Kenedy, 1982), while others suggest a reverse relationship between culture and performance (Berg, 1986; Pfeffer, 1981). Schein (1985) takes a contingency view of organizational culture whereas Brown (1995) suggests a relationship between organizational culture and the organization’s environment. Strong culture studies have been criticized on the ground that they do not provide the organization a sustained competitive advantage. In this present kaleidoscopic environment, importance has been placed on adaptive and flexible organizational culture (Bass & Avolio, 1993). They distinguish between transactional and transformational organizational cultures and suggest that transformational cultures are suitable to the present kaleidoscopic environment. Ogbonna & Harris (2000) and Sorenson (2002) also point out that strong culture firms find themselves at an advantage when the environment is relatively stable but when faced with a competitive environment innovative cultures enhance organizational performance.

Past research has shown that transformational cultures have a positive correlation with individual and organizational outcomes (Parry & Proctor, 2002). Results of previous research reveal that culture reflects an increasingly important role in building learning organization infrastructure (Preskill, Martinez-Papponi & Torres, 2001; Russ-Eft & Preskill, 2001; Graham & Nafukho, 2005). Pool (2000) and Hall (2001) suggest that a supportive culture is a necessary condition for encouraging organizational members to learn and share knowledge. Cummings & Worley (2001) purported that the culture in learning organization should be based on openness, creativity, experimentation and a tolerance for mistakes and the culture greatly influences how individuals gather, process and share information in the organization. A supportive organizational culture which encourages open communication and new ways of doing work enhance organizational learning (Pool, 2000). Further organizational culture helps establish the shared vision and systematic cooperation within organizations (Chang & Lee, 2007). Researchers agree that organizations which are moving towards a culture that encourages open communication, experimentation, risk taking and questions old assumptions and beliefs will enhance their capacity to learn (Lopez & Ordas, 2004). Lucas & Kline (2008) through a case study research identified that the major themes in organizational culture that supported organizational change and organizational learning were trust, psychological contracts and supportive subcultures. Similarly Danaeefard, Salehi, Hasiri & Noruzi (2012) also identified a strong relationship between organizational culture, particularly learning culture and participative culture, and the learning organization. Prugsamatz (2010) studied non-profit organizations and the results indicated that organizational culture practices had the highest correlation with organizational learning sustainability.

This was attributed to the fact that organization’s cultural practices act as the foundation of the learning that takes place in the organization and is needed for organizations to learn effectively and sustain their learning overtime. Organizational learning enhances organizational performance and flourishes in a culture which is open to learning, innovation and new ideas (Abbasi & Zamani-Mandashti, 2013). A study of the Iranian automotive industry shows that organizational learning mediates the relationship between organizational culture and organizational innovation indicating that to enhance innovation and organizational learning managers in organizations should focus on organizational culture (Abdi & Senin, 2015). Based on the above literature review the following hypothesis has been specified:

**H2**: A generative and adaptive culture will have a significant and positive relationship with the dimensions of a learning organization.

This study also seeks to investigate the difference in the development of learning organization between India and Nepal and the following hypothesis has been specified as the basis for focusing the empirical investigation.

**H3**: There will be no significant difference among the various dimensions of learning organization between India and Nepal.

The conceptual model developed for the study and the relationship among the variables is shown in Figure 1: Two independent variables were chosen for the study:
transformational leadership and organizational culture. Learning organization was taken as the dependent variable.

FIGURE 1. Conceptual model

METHODOLOGY
Sample and Procedures
The IT industry was chosen for the study since organizations in this sector are operating in an environment where technology changes at an increasing pace and products become obsolete in a short time span. Hence, they need to enhance their performance on the basis of learning to survive in this challenging environment. This study also compares selected IT organizations between Nepal and India. A comparison between these countries was made because the IT industry in India has a huge market share whereas in Nepal it is still growing. So it was thought useful to look at successful practices of one country and see if it could be made use of in the other country. For this purpose an exploratory research was designed and a survey questionnaire was used to collect data. In each country 4 (four) organizations were selected and 400 (four hundred) questionnaires were distributed to the selected organizations. The sample was selected using non-probability convenience sampling and consisted of managers and senior executives from all departments of the selected organizations. This sampling technique is useful when the focus is on exploratory research (Churchill, 1979). The questionnaires were personally delivered to the participating organizations and the completed questionnaires were collected in the same manner. Confidentiality and anonymity was assured to the respondents. In Nepal 300 (three hundred) and in India 280 (two hundred eighty) correctly completed questionnaires were returned.

Measures
The questionnaire developed by Podsakoff, MacKenzie, Moorman & Fetter (1990) was used to measure Transformational Leadership. It is a 28-item scale and measures transformational leadership on the basis of articulate vision, role model, foster goal acceptance, performance expectations, individual support, intellectual stimulation and transactional leader behavior.

OCTAPACE (Pareek, 1973) was used for measuring Organizational Culture. It is a 40-item questionnaire which measures the ethos of the organization in eight values: Openness, Confrontation, Trust, Authenticity, Proaction, Autonomy, Collaboration, and Experimenting.

The Learning Organization Profile Marquardt (1996) was used to measure the Learning Organization variable. This questionnaire contains 50 items and assesses five dimensions; namely Learning Dynamics, Organization Transformation, People Empowerment, Knowledge Management and Technology Application.

Data Analysis
To see if any difference existed in the development of learning organization between Nepal and India t-test was used. To understand the relationship between independent variables transformational leadership and organizational culture and the dependent variable learning organization, Pearson’s Product Moment correlation was used. To determine the statistical relationship between the variables, Multiple Regression analysis was done.

Comparison between Nepal and India – IT Sector
A comparison was drawn between the mean values of the dimensions of learning organization for various organizations in the IT sector between India and Nepal. A comparison of mean scores would help us to draw conclusion about the development of learning organizations and how they differ in the two countries under study in the IT sector. The scores and the results thereof have been shown in Table 1.1
TABLE 1: Comparison between India and Nepal-IT sector

<table>
<thead>
<tr>
<th></th>
<th>Mean (India)</th>
<th>Mean (Nepal)</th>
<th>SD (India)</th>
<th>SD (Nepal)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>2.93</td>
<td>2.91</td>
<td>.56</td>
<td>.71</td>
<td>.269</td>
</tr>
<tr>
<td>OT</td>
<td>2.87</td>
<td>2.63</td>
<td>.62</td>
<td>.65</td>
<td>2.408 *</td>
</tr>
<tr>
<td>PE</td>
<td>2.74</td>
<td>2.86</td>
<td>.57</td>
<td>.67</td>
<td>-1.094</td>
</tr>
<tr>
<td>KM</td>
<td>2.78</td>
<td>2.72</td>
<td>.66</td>
<td>.74</td>
<td>.529</td>
</tr>
<tr>
<td>TA</td>
<td>3.05</td>
<td>3.21</td>
<td>.62</td>
<td>.76</td>
<td>-1.276</td>
</tr>
<tr>
<td>Overall LO</td>
<td>14.38</td>
<td>14.32</td>
<td>2.73</td>
<td>2.93</td>
<td>.129</td>
</tr>
</tbody>
</table>

* * Significant at 0.01 level
* Significant at 0.05 level

TABLE 2: Comparison of coefficient of correlations between the overall learning organization and the dimensions of transformational leadership-IT sector

<table>
<thead>
<tr>
<th></th>
<th>AV</th>
<th>RM</th>
<th>FAG</th>
<th>PEx</th>
<th>IC</th>
<th>IS</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India n=70</td>
<td>.654**</td>
<td>.421**</td>
<td>.407**</td>
<td>.232*</td>
<td>.241*</td>
<td>.344**</td>
<td>.518**</td>
</tr>
<tr>
<td>Nepal n=75</td>
<td>.370**</td>
<td>.173</td>
<td>-.149</td>
<td>-.139</td>
<td>-.095</td>
<td>-.183</td>
<td>-.030</td>
</tr>
</tbody>
</table>

** Significant at 0.01 level
* Significant at 0.05 level

Table 1 shows the relationship depicted statistically between the overall learning organization and the various dimensions of transformational leadership in the IT sector in India and Nepal.

Table 2 shows the relationship depicted statistically between the overall learning organization and the various dimensions of organizational culture in the IT sector in India.

TABLE 3: Comparison of coefficient of correlations between the overall learning organization and the dimensions of organizational culture-IT sector

<table>
<thead>
<tr>
<th></th>
<th>Open</th>
<th>CF</th>
<th>Trust</th>
<th>AC</th>
<th>PA</th>
<th>AT</th>
<th>CB</th>
<th>Exp</th>
<th>OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India n=70</td>
<td>.690**</td>
<td>.663**</td>
<td>.630**</td>
<td>.247*</td>
<td>.806**</td>
<td>.274*</td>
<td>.547**</td>
<td>.665**</td>
<td>.805**</td>
</tr>
<tr>
<td>Nepal n=75</td>
<td>.695**</td>
<td>.377**</td>
<td>.320**</td>
<td>.480**</td>
<td>.777**</td>
<td>.409**</td>
<td>.626**</td>
<td>.576**</td>
<td>.666**</td>
</tr>
</tbody>
</table>

** Significant at 0.01 Level
* Significant at 0.01 Level

RESULTS
Preliminary Analysis
To test the psychometric properties of the survey instrument, a preliminary analysis was done. Those items which had cronbach alphas of .60 and above were retained. Based on this 25 items on the Learning Organization Profile, and all items in Transformational Leadership measure and OCTAPACE were retained.
Results And Findings
Result of the T-test show a difference on the dimension of organization transformation in India as compared to Nepal. Hypothesis 3 was accepted as difference was found only in one dimension of learning organization. Results of the correlational analysis show that in Nepal only articulate vision showed a positive correlation whereas in India all dimensions showed a significant and positive correlation and articulate vision had the highest correlation. Hence, hypothesis 1 was partially accepted. All dimensions of organizational culture showed positive correlations in both the countries and proaction had the highest correlation in both the countries. So Hypothesis 2 was also accepted.

For the Multiple Regression analysis, there were two sets of equation. In the first set the independent variable was transformational leadership. The dependent variable was learning organization. For Nepal articulate vision accounted for 13.7% of the variance and none other variable entered the equation. In India too articulate vision accounted for 42.8% of the variance. Here too none of the other variables entered the equation. In the second set, the independent variable was organizational culture while the dependent variable was learning organization. In Nepal proaction accounted for 60.3% of the variance and trust increased it by 3.7% but contributed negatively. Openness increased it by 4.3%, authenticity by 3.9% and autonomy by 3.6% taking the total variance to 75.8% but autonomy made a negative contribution. In India, proaction accounted for 64.9% of the variance, trust increased it by 3.2% taking the total variance to 68.1%. Other variables did not enter the equation.

DISCUSSION
"Learning" and the "Learning Organization" have become important in this complex and dynamic environment. Modern organizations have no other option but to transform on the basis of learning or become extinct. The review of literature identified various factors that influence “Learning” and “Learning Organization”. This study emphasized on transformational leadership and organizational culture as the important factors that help organizations to make the transformation. Based on a literature review two hypotheses for the study was developed to understand the relationship between both transformational leadership and organizational culture and the learning organization. To compare the difference in the development of learning organization between Nepal and India a third hypothesis was proposed. Findings of this study support the expectation that both transformational leaders and a generative and adaptive organizational culture have a positive influence in the development of a learning organization. Comparing the two countries, organizations in both countries do not show any progress towards the development of learning organization. The IT industry in Nepal is still at its infancy whereas in India it has a relatively longer history and is a huge industry with a large market share yet in both the countries the emphasis is on efficient use of technology. The focus is more on the technical aspect that is hard learning which is brought about through prescribed training and do not emphasize on soft learning which is concerned with the context in which technique is applied. Learning organization concept emphasizes on the hard as well as the soft learning that is the learning style and needs of individuals as well the environment in which these can be developed.

Leadership in both countries also did not show transformational leadership characteristics. They provided only the vision whereas transformational leadership goes beyond the articulation of the vision. In the literature there is support for a positive relationship between transformational leadership and learning organization but in both countries leaders do not promote learning. The national culture also has an impact on leadership. In cultures which rate high on collectivism and power distance, leaders use directive forms of influence and expect followers to obey and comply to their orders (Pasa, 2000). Both the countries in the study are high on collectivism and power distance and we see that the leaders provided the vision of the future and expected obedience and compliance of the followers. Transformational leaders are different in that they raise followers to a higher level making them capable of handling challenges on their own. Findings suggest that in both countries organizations should provide training to develop transformational leaders.

The organizational culture in both the countries also did not seem conducive to learning. In Nepal, proaction, openness and authenticity and in India, proaction and trust predicted learning organization. Literature suggests that organizational culture supports the development of learning organization. Literature also suggests a dual link between leadership and organizational culture (Ogbonna and Harris, 2000; Block, 2003; Taormina, 2008, Kargas and Varoutas, 2015) though this study did not examine this link. Bass and Avolio (1993) also contend that for ongoing change and learning transformational cultures are
necessary and transformational leadership favors transformational cultures. Leaders in both countries do not demonstrate transformational leadership characteristics hence they do not support a generative and adaptive culture.

An interesting finding was that autonomy and trust made a negative contribution in Nepal which is contrary to the literature. This finding can be examined in the light of the national culture of Nepal and leadership tactics. The national culture of Nepal is characterized by high collectivism and power distance and as discussed above leaders use the directive forms of influence and obtain compliance of the followers. Therefore, organizational members considered the presence of trust in the organizational culture as superficial and they rejected autonomy, as they were accustomed to being ordered and given direction.

CONCLUSION AND LIMITATIONS

Learning organizations have gained importance and have been identified as the strategy for survival and growth in this global economy. Both India and Nepal are facing tough global competition hence the need for transforming to learning organization. On comparing organizations in the IT sector, it was seen that the organizational leaders lacked transformational leadership characteristics and the organizational culture did not promote learning hence, the organizations were not making the transformation to a learning organization. Transformational leaders and a generative and adaptive culture have been identified in the literature as important variables that promote learning. Without a transformational leader and an adaptive and generative culture, the transformation does not take place. The IT sectors in both the countries were more concerned with the efficient use of technology, hard learning and short-term gains and overlooking soft learning and long-term survival of the organization. The findings of this study have theoretical contribution. It contributes to the existing body of literature on learning organization as it develops an understanding and appreciation of learning organization. It also aims to identify the leadership style and cultural environment that foster and facilitate learning. This is useful to the practitioner too as they can hire individuals or train employees with the required leadership skills. Managers can also promote a cultural environment which is conducive to learning.

The study has several limitations too. The first limitation arises from a small sample size. Also, as data has been collected from a single source, the findings and inferences may be biased by common method variance. Thirdly, limitation arises from the sampling technique used, non-probability based convenience sampling. Fourth, besides leadership and organizational culture which have been highlighted in this study, would be useful to study the influence of other factors in the development of learning organization.

REFERENCES


— This article does not have any appendix. —