

Influence of Organizational Learning Culture on Knowledge Worker's Motivation to Transfer Training: Testing Moderating Effects of Learning Transfer Climate

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Abstract The purpose of this study was to examine how organizational learning culture influences employees' motivation towards transfer of training. Also, how this relationship was affected by the existence of a favorable learning transfer climate in context of knowledge workers. Sample for this study ($n = 122$) was drawn from academicians working at various business schools in India. The perception towards their own organization's learning culture, learning transfer climate and their willingness to transfer knowledge from Faculty Development Programs to their teaching and research was measured. Hierarchical regression analysis was used to test the hypotheses and it was found that a positive perception of organizational learning culture was positively related to willingness to transfer training. This relationship was significantly moderated by an important dimension of learning transfer climate which are resistance to change and partially moderated by another dimension- performance coaching.

Keywords Organizational learning culture · Learning transfer climate · Motivation to transfer training · Signaling theory · Knowledge worker

In this age of rapid innovation, one way for organizations to achieve a sustainable competitive advantage over competitor

firms is to foster an organizational culture that advocates knowledge development and learning (Barney 1991; Bates and Khasawneh 2005). Organizations make huge investments on employee training and development each year (Silverman 2012). However, transfer of knowledge acquired through training programs to company stakeholders is not as easily achieved (Salas and Kosarzycki 2003). At best, only 15 % of the total learning that takes place during training gets transferred at work, as per some optimistic speculations (Cromwell and Kolb 2004). Several instances of failed training programs and inadequate learning have been noted. For example, the training program conducted by Burger King that resulted in its employees burning their feet while trying to walk over hot coal (Bunch 2007) or the ineffective team-building exercises conducted by the U.S. Postal Service (Feiden 2003) that cost the firm millions of dollars. The learning disseminated through majority of training activities gets lost within a span of a year as per experts (Salas et al. 2012).

Past research has repeatedly highlighted the need for fostering a learning environment in organizations (Kolb and Kolb 2005) such that employees are motivated to actively learn new things and then share their knowledge with their peer. At the organizational level, research has identified organizational culture as a key driver for promoting a sense of healthy knowledge sharing among employees (Confessore and Kops 1998; Garvin 1993). Employees need to first realize that their firm expects them to disseminate the learning generated from a training exercise among the organizational members who did not attend the training (Bunch 2007; Clarke 2004). Unfortunately, this is seldom the case (Cromwell and Kolb 2004). Parallel studies on organizational climate have shown that climate can affect culture perceptions among employees (Bates and Khasawneh 2005; Kopelman et al. 1990) and can drive employees to share training acumen with peers (Egan et al. 2004).

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In the current study, an attempt has been made to empirically test the joint effect of organizational learning culture and learning transfer climate on knowledge workers' motivation to transfer knowledge acquired through training programs. Knowledge workers may be summarized as employees who are involved in high-tech professions such as engineering, academics, law, medicine, accounting, science (Nomikos 1989), and who create intangible assets (Harrigan and Dalmia 1991). In concurrence with this, academicians, especially in higher education, may be categorized as part of knowledge worker community. Academicians in higher education institutions are required to teach advanced topics on specialized areas, mostly in recent fields of research and innovation. Academicians are expected to publish their research works in the form of research papers in reputed peer-reviewed journals, thus creating intangible assets for their institutions.

As part of developing and updating knowledge resources of academicians, academic institutions frequently conduct faculty development programs (FDPs). The academic world has witnessed several shifts in pedagogic innovation in recent times, be it through e-learning or use of virtual simulations in classrooms (Kim and Bonk 2006). Recent advances in the form of software packages such as SPSS, R, SAS and AMOS in social science research or MATLAB in scientific domains has made the life of higher education practitioners more challenging (Hagenson and Castle 2003). In keeping with such technological advances, modern day academic institutes purchase the latest software packages without paying much attention to providing a proper assimilation infrastructure to the faculty members on such technology. However, more often than not, management at academic institutions is not able to convince their faculty to willingly learn and then share new and upcoming techniques (Kong 1999).

With respect to academic set-ups, perception of presence of a healthy learning culture and a transparent transfer mechanism for knowledge of institutional members may help to optimize collaboration in research and teaching innovations. Hence it is necessary to empirically test how significant faculty members perceive the importance of organizational learning culture and learning transfer climate in order to feel motivated to transfer their knowledge acquired through faculty development programs to high-quality research.

Literature Review

Organizational Learning Culture

Organizational culture has been conceptualized as a pattern of basic assumptions shared by a group of people (Schein 1984). Organizational learning is an integrated process of new knowledge formation which involves shaping individual and organizational behavior (Murray & Donegan 2003).

Organizational learning has been defined as, "a continuous testing of experience and its transformation into knowledge available to whole organization and relevant to their mission" (Senge 1990, p. 6). The concept of organizational learning culture has its roots in the notion of organizational learning. Organizational learning culture (OLC) is the culture that fosters the practices of acquisition of information, distribution and transfer of learning and recognition for learning-based application (Yang et al. 2004).

Such a culture helps in the development of a shared consensus among organizational members about the value of learning and the use of new learning tools in work for the fulfillment of organizational goals and objective (Bates and Khasawneh 2005). OLC has been found to have a positive impact on firm level outcome variables such as knowledge and financial performance (Yang 2003) and it is also essential to maintain competitive advantage (Fiol 1991; Slater and Narver 1995). Previous studies have found that a higher value for positive learning orientation can lead to increased market information generation and dissemination of knowledge. This in turn, directly affects the degree to which an organization makes changes in its marketing strategies (Sinkula et al. 1997). The role of a learning oriented culture is equally important in today's world to maintain competitive advantage (Fiol 1991; Slater and Narver 1995).

Some researchers have considered OLC as a multidimensional construct (Egan et al. 2004) while others have treated it as a unified construct (one-dimensional) in order to test overall effect of learning culture on employee outcome variables such as organizational commitment (Joo 2010). For this study, OLC has been treated as a holistic construct (Joo 2010; Yang 2003).

Academic institutions are supposed to be oriented towards a culture of continuous learning (Watkins 2005). As far as academic institutions are concerned, the main learning dissemination activities include teaching, research and production of knowledge (Hoveida et al. 2006). Hence, academic organizations in today's world have the same need as corporate entities to provide training to their faculty members to keep them up to date on research and teaching skills. In fact, faculty members are considered as key representatives of knowledge workers in this information age (Drucker 1993). Institutions across the world have begun to facilitate knowledge repositories in the form of subscriptions in digital libraries, e-books and webinars (Kim and Ju 2008). The objective is to provide the academicians a network of collaboration and knowledge dissemination. However, a major concern in this case is the lack of faculty motivation to share their research or course materials (Kong 1999). This is often aggravated by lack of trust among faculty colleagues and absence of organizational measures to assure and safeguard individual knowledge. As a result, the initiatives taken by universities and higher education institutions to help their employees learn

and share novel concepts and techniques often do not end up serving their true purpose.

Learning Transfer Climate

A related construct, which has been the focus of numerous research studies related to organizational level outcomes, is organizational climate. Organizational climate may be defined as a psychological description of work environment by the employees (Bates and Khasawneh 2005). Organizational climate is considered to be the projection of organizational culture (Kopelman et al. 1990). Organizational culture differs from organizational climate on the premise that the former is a belief shared by every member of the organization, whereas the latter is the personal interpretation of the working mechanism of the organization by individual employees (Bates and Khasawneh 2005; Cromwell and Kolb 2004; Subedi 2004). Therefore, it may be inferred that culture is the invisible force and climate is the visible tool for conveying what is appreciated and what is criticized in the workplace and they together shape employee perception towards their organizational environment (Galang and Ferris 1997). Denison (1996) also differentiated organizational culture and climate on the grounds that the former encompasses underlying values and beliefs, while the latter is a surface-level manifestation of such beliefs.

Past research has shown evidence that organizational climate has significant influence on employees' performance and productivity (Egan et al. 2004; Skerlavaj et al. 2007). With respect to facilitating employee training and development, a specific type of organizational climate known as learning transfer climate is considered to be crucial (Bates and Khasawneh 2005). Learning transfer climate refers to the perception about the existence of a system that encourages sharing of knowledge and skills among the organizational members (Holton and Bates 2002). Regarding learning initiatives, the presence of a learning transfer climate may help in motivating employees to devote more time to learning newer things and applying them in the work context (Bates and Khasawneh 2005).

Research conducted in higher education context indicates that most of the faculty training programs fail to impart desired knowledge that is disseminated through such programs (Caffarella 2002). Several training transfer models in the domain of higher education have stressed factors such as training characteristics, training program related variables and work environment factors as crucial antecedents of training transfer (Baldwin and Ford 1988; Broad and Newstrom 1992; Cervero 1988). The work environment especially has received increasing attention from researchers since the mid-1990s as an important determinant of learning transfer in an academic setting (Merriam and Leahy 2005). A non-supportive learning transfer climate has been identified as a major barrier to transfer of knowledge (Taylor 2000).

Multi-Dimensional Structure of Learning Transfer Climate

Learning transfer climate has been empirically verified to be a multi-dimensional construct (Holton and Bates 2002; Velada et al. 2007). The Learning Transfer System Inventory (LTSI) developed by Holton and Bates (2002) provides a framework for operationalizing the construct of learning transfer climate, which can be further categorized under two broad heads- a) training specific and b) training in general. The training specific dimensions of learning transfer climate relates to specific issues regarding specific training programs and have no application for studies that wish to capture trainee perception about training programs in general (Bates and Khasawneh 2005). Hence, for the current study of learning transfer climate, the focus is on the training in general aspect of learning transfer climate.

The training in general sub-categories of the LTSI can again be segregated into two sub-dimensions, which are perceived task support, and individual cognitive states. Perceived task support refers to the degree to which the top management in an organization facilitates transfer and dissemination of learning for its employees. There are two major aspects of task support which are resistance to change and performance coaching. Resistance to change refers to the perception among employees about how flexible their teammates, superiors and subordinates are to accepting new change (Bates and Khasawneh 2005; Holton and Bates 2002). Performance coaching refers to the degree to which employees perceive they receive constructive opinion, assistance and support from their fellow co-workers when trying to learn new methods or techniques at work (Holton et al. 2000; Velada et al. 2007). Performance coaching and resistance to change provide a meaningful representation of learning transfer climate from the organizational perspective (Bates and Khasawneh 2005). Hence, the degree to which the organization endeavors to provide performance oriented feedback and shows its enthusiasm in adopting new changes. This will also reflect the degree to which employees perceive the climate of the organization that will facilitate transfer of knowledge and skills.

In contrast, the individual cognitive states such as performance self-efficacy, effort-performance expectations and performance-reward expectations vary from individual to individual and are dependent on the employee's psychological characteristics (Bates and Khasawneh 2005). It is acknowledged that transfer of training is dependent on three mutually exclusive antecedents (Subedi 2004): the trainee's characteristics (self-efficacy, motivation, job commitment, and personality), the nature of training program (explicit vs. tacit) and organizational characteristics (supervisor support, work culture, climate). Among these, individual trainee characteristics are difficult to control from an organization's perspective and though attempts to use training appraisal tools to gauge and monitor employee performance post training has been made in

certain cases, it is not possible to generalize such endeavors for all employees (Broad and Newstrom 1992; Foxon 1989; Velada et al. 2007).

Therefore, these factors were not included in the current study as the focus. Here focus is only on the organizational factors which facilitate or hamper the development of a learning transfer climate. Empirical investigation has been lacking to validate the interrelationship between learning culture, learning transfer climate and outcomes of learning such as learning transfer intention, behavioral change, improvement in performance etc.

Motivation to Transfer Training

Both organizational learning culture and learning transfer climate are considered as important antecedents of employees' willingness to learn and share their knowledge (Bates and Khasawneh 2005). That willingness of the trainees to use and share the acquired knowledge and skills from training with their colleagues may be defined as their motivation to transfer training (Noe and Schmitt 1986). Motivation to transfer training involves the drive or inspiration of an individual to apply the knowledge gained from formal or informal learning to a job-specific context.

According to Noe and Schmidt (Noe and Schmitt 1986), the trainees' attitudes, interests, values, and expectations can influence training effectiveness. Empirical research has shown that learning transfer climate has a significant influence on the motivation of trainees to transfer their knowledge (Egan et al. 2004; Facticeau et al. 1995; Seyler et al. 1998). Participants who are more serious about the value addition from the training are more motivated to transfer training to work than those who do not have any specific objective to attend the training (Huczynski and Lewis 1980).

In the past, researchers have not directly looked into understanding how organizational climate can complement organizational culture to facilitate in proper transfer of training. Culture being an omnipresent entity (Schein 1984), can be difficult for employees to perceive and this is where a learning transfer climate can provide adequate cues to the employees that a learning culture exists in the firm (Saks and Belcourt 2006). Previous research also indicates that for having a healthy learning transfer climate, there is a requirement for a supportive learning culture in different work setups such as academic institutions (Lightner et al. 2008). The academic learning culture has been acknowledged as a distinct feature of academic industry (Peterson and Spencer 1990). Research on impact of academic climate on faculty perceptions about their employers have also been conducted (Locke et al. 1983). Both culture and climate have been identified as key factors influencing faculty motivation to conduct and share research (Schein 1984; Senge 1990). This provides all the more reason

for testing for joint effect of culture and climate on individual motivation to transfer knowledge in academic context.

Theoretical Framework and Research Hypotheses

The theoretical support for this study has been drawn from the Signaling Theory (Spence 1973, 2002) and the Experiential Learning Theory (Kolb 1984). The Signaling Theory states that certain signals can communicate specific meanings about the message it is trying to convey to the receiver.

From the perspective of the Signaling Theory, if an organization fosters a learning culture, then its employees will receive certain signals/indications that their firm values transfer of knowledge and skills learnt by them from the training programs provided by their organizations (Bloor and Dawson 1994; Spence 2002). If the transfer climate accurately depicts the intention of the management to be flexible and open to radical changes, then the employees may also reciprocate the attitude with creative idea generation and innovative solutions and vice versa.

As per the Experiential Learning theory (Kolb 1984), learning is an outcome of an individual's interaction with various stakeholders, one of which is the immediate environment. Learning is also a process where there is a need for acknowledgement through peer feedback of one's knowledge. Based on this it may be argued that if employees perceive their organization to promote a healthy learning culture through feedback and mentorship then they would be further motivated to learn and share their knowledge.

Accordingly, if the transfer climate projects that the top management wishes to encourage feedback between supervisors, peers and subordinates in the firm whenever any employee is in need for instructions, then employees may feel inspired to participate in knowledge sharing with their peers and subordinates (Clark et al. 1993). With respect to performance coaching dimension of learning transfer climate, it may be inferred that having a facilitating system to monitor performance can help employees to understand the extent to which their development has taken place due to training. This in turn will reflect in their increased commitment to transfer their knowledge. The corresponding hypotheses are:

H1: Relation between organizational learning culture and motivation to transfer training will be moderated by the performance coaching dimension of learning transfer climate such that a higher value of performance coaching will enhance the effect of organizational learning culture on motivation to transfer training.

As for the resistance to change dimension of transfer climate, the lesser the corporation opposes new ideas, the more

the employees will be inclined to learn and disseminate new knowledge. This relationship can be hypothesized as:

H2: Relation between organizational learning culture and motivation to transfer training will be moderated by the resistance to change dimension of learning transfer climate such that a higher value of resistance to change will reduce the effect of organizational learning culture on motivation to transfer training.

The above relationships are represented through the following theoretical model (Fig. 1).

Method

Participants

In the present study, focus is on the implications of learning culture and learning transfer climate on faculty motivation to apply their knowledge gained from Faculty Development Programs (FDPs) and academic staff training courses for their research and teaching.

The data was collected from faculty members of business schools of India using a survey. The universities were selected based on a ranking provided by Business Today about the top 100 business administration institutes in India (Business Today’s India’s best B School Rankings 2015). Ten universities from different parts of India (three from the North, two from the East, two from the West and three from the South) were selected randomly from that list. The institutes all offered courses at graduate and post-graduate level on business administration. On average, the number of full time faculty per institute was 36, considering full-time faculty only. The initial pool of respondents was selected using a random sampling

technique from the overall list of faculty profiles at the selected university websites.

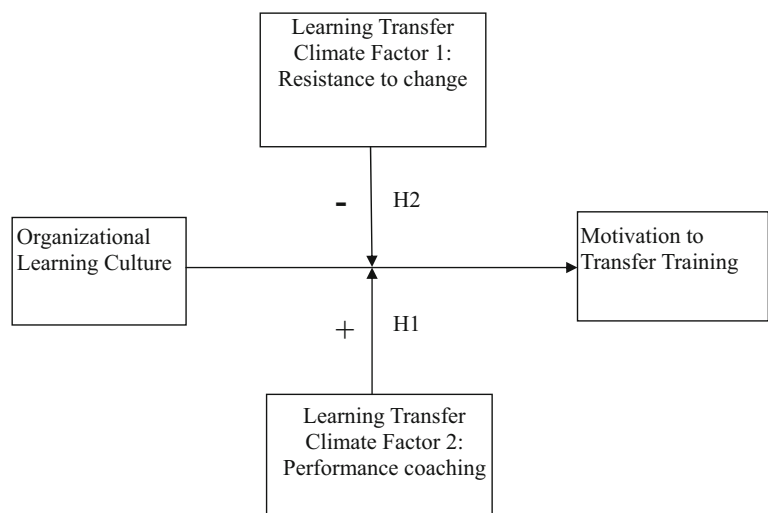
Faculty members were approached via e-mail to respond to an online survey. In total, e mails were sent to 356 faculty and teaching staff out of which 123 replied (response rate of 34.55 %). The male respondents were prominent in the sample at 64 %. The majority of respondents (61.6 %) were in the age range of 26–35 years. On average, the respondents had undergone at least three FDPs in the year preceding the data collection for this study. On further review, one questionnaire was found incomplete, and this response was excluded from the study. Therefore, the final number of usable responses was 122.

Measurement of Variables

Organizational Learning Culture (OLC) The Dimensions of Learning Organization Questionnaire, abbreviated as DLOQ (Yang et al. 2004), which is a valid measure of OLC (Joo 2010) was used in this study for measuring the construct OLC. The shortened seven item version of DLOQ, which is appropriate for researchers who want to measure the OLC as a unidimensional construct, was used in this study following similar application by previous researchers (Joo 2010; Yang 2003). The DLOQ scale items are represented on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The reliability of the above scale in the current study was 0.84.

Learning Transfer Climate Holton and Bates (2002) Learning Transfer System Inventory Version 4 (LTSI V4) was used for the measurement of learning transfer climate dimensions. Two sub-dimensions of the Training In General sub-scale of the LTSI V4, namely, Resistance to Change and Performance Coaching, which represent task support sub-dimensions of learning transfer climate, were used for this

Fig. 1 Theoretical model (Moderating Model)



study on a 5-point Likert scale. The reliabilities of the respective sub-scales were 0.77 for Performance Coaching and 0.78 for Resistance to Change.

Motivation to Transfer Training (MTT) Motivation to Transfer Training was measured using the 11 item Motivation to Transfer Training (MTT) scale by Machin and Fogarty (2004). Responses were obtained on a 5-point Likert scale. The reliability coefficient of this scale was found to be 0.87.

Control Variables Gender, age and number of faculty members per institute were controlled for this study. All control variables were dummy coded. Gender was coded as Male = 1, Female = 2. Age was coded as 1 = Less than 26 Yrs, 2 = 26–35 Yrs, 3 = 36–45 Yrs, 4 = 46–55 Yrs, 5 = 56–65 Yrs, 6 = above 65 Yrs. Number of faculty members was coded as 1 = 0–50, 2 = 51–200, 3 = 101–200, 4 = greater than 200. Proper permission was obtained for all the psychometric tools used in this study from the scale developers of the DLOQ, the LTSI and the MTT respectively.

Results and Analysis

Multivariate techniques were used to test the relationships proposed above. Descriptive statistics were calculated using measures of mean and standard deviation. To test moderating effect of learning transfer climate on the OLC-MTT relationship, hierarchical multiple regression analysis was conducted. Table 1 depicts the means, standard deviations and correlation between the variables of interest. 64 % of respondents were male. Majority of respondents were under the age group of 26–35 years (61.5 %), followed by the age group of 36–45 years (18.9 %). 63 % respondents worked in institutions with less than 50 full time faculty members.

The correlation matrix provided evidence of the fact that Organizational Learning Culture ($M = 3.2348$, $SD = 0.79502$) and Performance Coaching ($M = 3.3958$, $SD = 0.95688$) have moderately strong correlation with Motivation to Transfer Training ($M = 3.9733$, $SD = 0.58227$) indicating that OLC ($r = 0.254$, $p < .001$) and Performance Coaching ($r = 0.294$, $p < .001$) may have significant main effect on MTT. However, correlation of Resistance to Change ($M = 2.9458$, $SD = 0.91479$) with MTT was found to be insignificant ($r = .055$, $p > .05$), which suggested that Resistance to Change may not have any direct effect on MTT. Further, a hierarchical regression analysis was conducted to test for moderating effects.

Moderation Analysis

A multiple hierarchical regression analysis was conducted to test the moderation effect of Organizational Learning Transfer Climate factors on the OLC-MTT relationship. To test the moderating effect, two interaction variables were created using centering technique to avoid multicollinearity problem (Aiken and West 1991; Judd et al. 2001) which were named Organizational Learning Culture X Resistance to Change and Organizational Learning Culture X Performance Coaching.

The variables were entered in three stages. At stage 1, demographic variables were entered in the model to isolate effect of control variables from the model. The demographic variables explained only 2.5 % of the variance for the outcome variable (MTT). None of the demographic factors were found to be a significant predictor of MTT [$F(3, 119) = 1.044$, $p < 0.05$].

At stage 2, the independent variables Organizational Learning Culture, Resistance to Change and Performance Coaching were entered at the same time. OLC ($t = 2.105$, $p < .05$) and Performance Coaching ($t = 2.844$, $p < .01$) demonstrated a significant direct effect on MTT, suggesting that

Table 1 Correlation diagnostics

Name of construct	M	SD	1	2	3	4	5	6	7
1. Motivation to Transfer Training	3.9733	.58227	(.87)						
2. Gender	1.3689	.48448	-.055	–					
3. Age	2.4590	.93727	-.065	-.106	–				
4. Number of Employees	3.2459	.92987	-.146	.067	.167***	–			
5. Organizational Learning Culture	3.2348	.79502	.254**	-.094	-.029	-.198***	(.84)		
6. Resistance to Change	2.9458	.91479	.055	-.004	-.165***	.005	-.282**	(.78)	
7. Performance Coaching	3.3958	.95688	.294*	-.144	-.100	.014	.289**	-.131	(.77)

Scale reliabilities are represented diagonally in brackets and in bold

Gender coded as Male = 1, Female = 2. Age coded as 1 = Less than 26 Yrs, 2 = 26–35 Yrs, 3 = 36–45 Yrs, 4 = 46–55 Yrs, 5 = 56–65 Yrs, 6 = above 65 Yrs. Number of employees coded as 1 = 0–50, 2 = 51–200, 3 = 101–200, 4 = greater than 200

* $p < .001$, ** $p < .01$, *** $p < .05$

both on their own can significantly influence the latter. The total variance explained was 15.1 % ($R^2 = .151, p < .01$). The additional variance explained ($\Delta R^2 = .125, p < .01$) was 12.5 %, which was a significant improvement from stage 1. However, Resistance to Change was not a significant predictor of Motivation to Transfer Training ($t = 1.627, p > .05$) Table 2.

In the third stage, the interaction terms were entered. The results indicated that the main effect of OLC on MTT became insignificant ($t = 1.020, p > .05$) though Performance Coaching continued to be significant predictor of MTT ($t = 3.363, p < .01$). Resistance to Change still did not show any significant main effect on MTT ($t = .595, p > 0.5$). The interaction term Organizational Learning Culture X Resistance to Change was significant at 95 % confidence level and the beta coefficient value was negative ($\beta = -.144, t = -2.180, p < .05$) indicating that the higher the organization's resistance to new ideas, the lesser is the impact of Organizational Learning Culture on Motivation to Transfer Training. An additional 15.8 % variance was explained by this model ($\Delta R^2 = .158, p < .001$), and altogether 30.8 % of variance was explained at this stage ($R^2 = .308, p < .001$). The interaction effect of OLC with Performance Coaching was also significant at 99 % confidence level ($3.895, p < .001$).

Therefore, the results provided support for moderating impact of Resistance to Change on relationship between OLC and MTT, providing support for H2.

As for H1, we received partial support, since the main effect and the interaction effect of Performance Coaching were both significant. In order to further confirm the moderating effect of the learning transfer climate variables on OLC-MTT relationship, we plotted three slopes for confirming the moderating effect of Performance Coaching and Resistance to Change at the mean, at 1 SD above the mean and at 1 SD below the mean values of Performance Coaching and Resistance to Change following the prescription of Stone and Hollenbeck (1989). The software application MODGRAPH Version 3.0 (Jose 2013) was used for this analysis. Figure 2 depicts the moderating impact of Resistance to Change on the OLC-MTT relationship. The plot reveals that higher the climate for Resistance to Change, lesser is the impact of OLC on MTT.

Figure 3 displays the plot for moderating effect of Performance Coaching on the OLC-MTT relationship. The plot shows that MTT is highest in an OLC which promotes highest level of Performance Coaching.

Therefore the above plots further support the hypotheses proposed in this study.

Table 2 Results of hierarchical moderator regression analysis

Variables entered	β	SE	t value
Stage 1: Control variables			
Age	-.051	.110	-.558
Gender	-.048	.058	-.516
Number of Employees	-.135	.057	-1.465
$R^2 = .025$			
F(3119) = 1.044			
Stage 2: Organizational Learning culture and Learning Transfer Climate			
Organizational Learning Culture	.200	.069	2.105***
Resistance to Change	.148	.058	1.627
Performance Coaching	.260	.056	2.844**
$R^2 = .151$			
$\Delta R^2 = .125$			
F (6116) = 3.432**			
Stage 3: Interaction variables			
Organizational Learning Culture X Resistance to Change	-.144	.041	-1.680***
Organizational Learning Culture X Performance Coaching	.351	.052	3.895*
$R^2 = .308$			
$\Delta R^2 = .158$			
F (8114) = 6.351*			

Dependent variable: Motivation to Transfer Training (MTT)

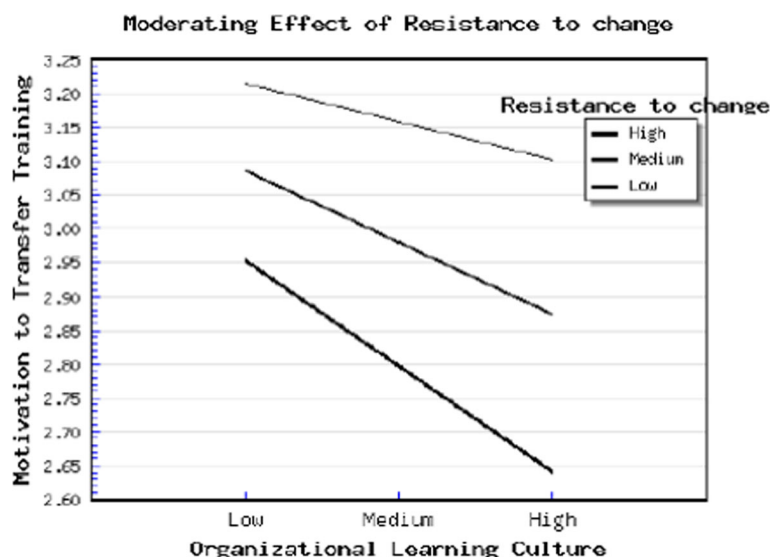
Sample size (n) = 122

*Significant at $p < 0.001$

**Significant at $p < 0.01$

***Significant at $p < 0.05$

Fig. 2 Moderating effect of resistance to change on relationship between organizational learning culture and motivation to transfer training



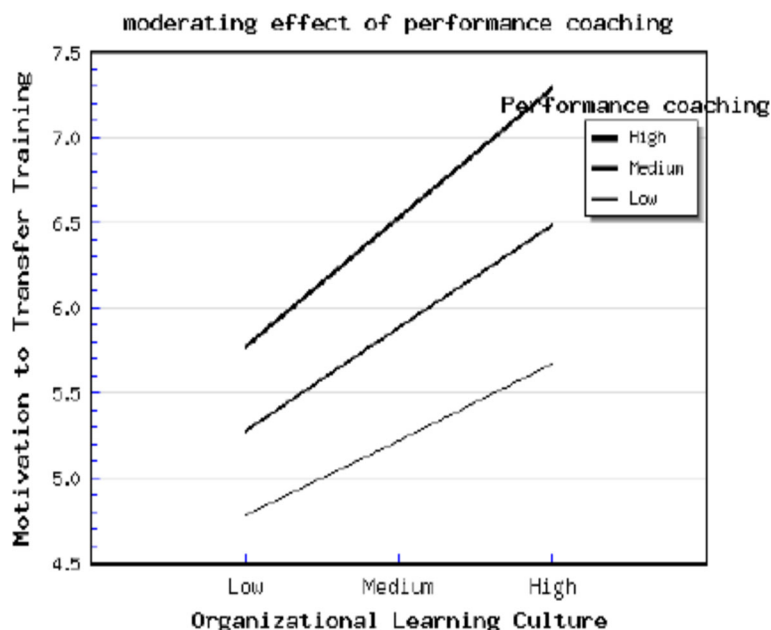
Discussion

This study explored the relationship between organizational learning culture, learning transfer climate and motivation to transfer training in an academic context. Regarding OLC, this study gives conclusive evidence that a learning culture can lead to better transfer of training skills and knowledge among faculty members in academia. This may result in a significant return on investment for the training costs incurred by academic institutions and also ensure development of knowledge resources by the faculty members (Chatterjea and Moulik 2006). Therefore, from an academic institution’s point of view, it may be inferred that maintaining a strong learning culture can significantly influence the performance level of

the institutes in terms of better student development. Having the necessary mechanisms to propagate a favorable learning transfer climate should encourage faculty members to share their proprietary knowledge and indulge in more extensive collaboration. This may help in the transfer of learned skills and knowledge to concrete outcomes such as research publications, consultancy, R&D projects and patents (Kong 1999).

The resistance to change dimension of the learning transfer climate (Bates and Khasawneh 2005) demonstrates a full moderating impact on the above relationship. This finding indicates that an organization which resists new ideas and challenges is not ideal encouragement for employees to share their knowledge. If the management does not resist new ideas, then employees’ motivation to transfer knowledge and ideas

Fig. 3 Moderating effect of performance coaching on relationship between organizational learning culture and motivation to transfer training



will enhance. In the academic context, management should encourage faculty seminars where academic colleagues can share their ideas and receive constructive feedback on their work. Management should take action against using such platforms for deriding other people's work and prevent negative criticism. At the same time, management should support new and radical ideas generated by faculty members by providing them adequate funding and resources to help give shape to their abstract ideas. Such initiatives should help faculty members to feel motivated to conduct research (Chen et al. 2006).

The performance coaching dimension however does not demonstrate a full moderating effect on the above relationship. This suggests that performance coaching can independently influence employees' motivation to disseminate their knowledge and also have a joint effect on the OLC-MTT relationship. From this finding, it may be inferred that a collaborative research culture should promote free discourse among the senior and junior faculty members of institutions. Senior faculty members, especially those at professor and associate professor level, have huge experience conducting scientific research. Junior faculty members, such as assistant professors and lecturers, may be fresh with novel ideas and aware of the latest developments. A climate fostering collaborative research in academic setting can be a revolutionary step to ensure knowledge dissemination among erudite scholars. This is more relevant in academic context because traditionally, academicians are known for maintaining distance from their peers and they are in general hesitant to accept their colleagues' works (Kim and Ju 2008). Faculty collaboration programs can be effective platforms for bringing the isolated academic community closer. Stevenson et al. (2005) have described one such initiative conducted at the University of Hartford which reaped great rewards for the participants in terms of knowledge dissemination and teaching effectiveness. The findings also provide empirical support for explaining the effect of perceived barriers and enablers to learning programs (Klein et al. 2006). Therefore, the findings from this study help emphasize the need for encouraging feedback systems for appreciating inter-departmental faculty knowledge and reduce the habit of discouraging new ideas.

Faculty's performance is generally mapped through their research and teaching outputs (Kim and Ju 2008). However, there is concern over the lack of meaningful research productivity from majority of the academic community (Merriam and Leahy 2005) and add to that, mostly academicians prefer to work alone (Kong 1999). In developed nations, there is at least some conscious effort to provide faculty with a congenial environment to conduct industry-oriented applied research (Dundar and Lewis 1998). However, the same in developing nations is highly limited due to lack of funding and industry collaboration (Costello and Zumla 2000) and unavailability of research facilities such as laboratories and proper research database in majority of higher education institutions (Brooks

et al. 2005). In India, for example, the role of academia in contributing to research and development and management practices is highly under-utilized (Chatterjea and Moulik 2006). India has nearly 700 universities affiliated to the University Grants Commission (UGC) as of 2014 (University Grants Commission Report 2014). Sadly, in terms of research and publication, India lags far behind most nations. Research and development expenditure also continues to receive the least share of the government budget (OECD Science and Technology Indicators 2012). In terms of number of patents filed by Indian academicians, the picture is again dismal as per the Global Competitiveness Index (GCI) report (2014) that is an indicator of how many patents have been filed by a country in a given period. This gives indication that higher education faculty members may not have favorable organizational culture and climate for research in developing economies such as India in comparison to developed nations (Chatterjea and Moulik 2006).

Implication of the Study

The findings from the above study are applicable for both industry as well as academic settings. Based on these findings we can suggest that managers/academic coordinators should take actions to make the tacit elements of learning culture manifest properly through learning transfer climate. The perception of faculty regarding the institution's desire to facilitate a healthy knowledge sharing culture can be influenced positively if members of the concerned management hold periodic meetings with faculty members to discuss their expectations from FDPs. Academic supervisors may apply verbal encouragement for members of the staff who are able to demonstrate willingness to share their knowledge with institutional/departmental colleagues. This can be done through an interactive session with faculty from respective departments as well as through inter-departmental seminars. Management can even try appreciating the learning transfer efforts of faculty by giving ratings to the best knowledge sharer of the month based on a monthly 360 degree appraisal of the employees through an assessment center.

Although previous studies have substantiated the fact that both organizational learning culture and learning transfer climate are essential for transfer of training (Salas and Kosarzycki 2003; Salas et al. 2012), this is a novel attempt to show how both learning culture and learning transfer climate go hand in hand in the knowledge dissemination process in the academic industry. One cannot be successful without support from another. Therefore, this study offers a fresh perspective on organizational learning research and may help higher educational practitioners to finally tackle the obstacle of making learning through training a successful and continuing process (Bunch 2007).

However, this study is not without its imitations. More detailed examination of the Learning Transfer System Inventory (LTSI) is required to verify the construct validity of the scale. For this study only two dimensions of LTSI were used. Further examination may adopt the other dimensions of LTSI. The environment for this study may be altered with an industrial setup to verify the findings obtained in this study. There is also scope for replicating the above study with a larger sample size, with other academic disciplines as well as in different industry context.

Compliance with Ethical Standards

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Ethical Approval (in Case of Animal Use) This article does not contain any studies with animals performed by any of the authors.

Ethical Approval (for Human Participants) All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study.

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