



Journal of Workplace Learning

Decoding training effectiveness: the role of organisational factors

Amitabh Deo Kodwani,

Article information:

To cite this document:

Amitabh Deo Kodwani, (2017) "Decoding training effectiveness: the role of organisational factors", Journal of Workplace Learning, Vol. 29 Issue: 3, pp. -, doi: 10.1108/JWL-05-2016-0038

Permanent link to this document:

<http://dx.doi.org/10.1108/JWL-05-2016-0038>

Downloaded on: 30 March 2017, At: 11:39 (PT)

References: this document contains references to 0 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 38 times since 2017*

Users who downloaded this article also downloaded:

(2013), "The influence of training and training transfer factors on organisational learning and performance", Personnel Review, Vol. 42 Iss 3 pp. 324-348 <http://dx.doi.org/10.1108/00483481311320435>

(2014), "Signaling the importance of training", Journal of Managerial Psychology, Vol. 29 Iss 7 pp. 829-849 <http://dx.doi.org/10.1108/JMP-03-2012-0092>



Access to this document was granted through an Emerald subscription provided by emerald-srm:318550 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Decoding Training Effectiveness: The Role of Organisational Factors

Introduction

Organisations invest significant amounts of resources in terms of time and money into training to enhance employees' knowledge, skill and attitude (Aguinis & Kraiger, 2009; Miller 2012). In the United States alone, organizations spend upwards of \$60 billion per year on training, with an average of around 30 hours of training per employee per year (Noe, 2002). The average spending was around \$75-100 per person per year in 1991, which increased to \$761 in the year 2001, and around \$1208 in 2014. (Wexley and Lathan, 1991; Green and McGill, 2011; ASTD¹ report 2002, 2015). In India too, the training expenditure amounting to the huge sum of 30 million per year (Pareek & Lynton, 2011). Yadapadithaya and Stewart (2003) highlighted that Indian companies do spend around 1.2 percent of their payroll on training annually. This clearly points out that there is a continuous rise in training investment. Organisations do invest with a hope that it will result in an increase in productivity and ultimately firm performance (Huselid, 1995; Kitching and Blackburn, 2002). However, training investment initiatives pays off only when employees actually transfer the content learned during the training into practice (e.g. Hutchins et al., 2010).

Looking to the hefty investment on employees' training initiatives, it is important to determine the extent to which such investment benefit organization, which is only possible when there is a positive transfer of learning at the workplace (Berry & Morris, 2005). There have been historic concerns regarding the limited evidence that knowledge and skills acquired during training are used, or transferred, back to the job (Baldwin and Ford 1988). Previous research studies indicate that only a portion of the knowledge and skills learned during training are really transferred back to the job (Baldwin and Ford, 1988; Broad and Newstrom, 1992; Burke and Baldwin, 1999; Mackay, 2007). Cromwell and Kolb (2004) and Lim and Morris (2006) indicated that approximately 10 to 15 percent of the training actually gets transferred to the workplace. Similarly, other studies also highlighted that not more than 10 percent of these expenditures actually result in transfer to the job (Georgenson, 1982; Broad

¹: American Society for Training and Development

& Newstrom, 1992; Holton & Baldwin, 2000; Kupritz, 2002. These estimates indicate a questionable return on investment and leave human resource professionals scrambling to prove the worth of their work and the programs they sponsor (Becker, Huselid, & Ulrich, 2001; Fitz-Enz & Davison, 2002). Taking into consideration the importance, potential impact and the costs of training on organizations, researchers should have a better understanding of the factors that assist training effectiveness or training transfer (Winfred Arthur et. al, 2003; Baldwin et al., 2009; Blume et al., 2010).

Various research studies were conducted in the past to explore relationship between several individual and organisational factors with training transfer (Baldwin & Ford, 1988; Ford & Weissbein, 1997; Geilen, 1996; Seyler et al., 1998; Tracey, Hinkin, Tannenbaum, & Mathieu, 2001; Kodwani and Singh, 2004; Blume et al., 2010; Milia & Cameron, 2013; Manju and Suresh, 2013; Ragini et.al., 2016). Baldwin and Ford (1988) published their literature review on the transfer of training in which they also noted that there is a transfer problem in organizations. They developed a framework for examining the transfer process, which shows the relationship between various training inputs in terms of trainee characteristics, training design, and work environment characteristics with training transfer. Further Blume et al. (2010) meta-analysis highlighted a number of shortcomings when it comes to improving the transfer of training. He pointed out that the strongest situational predictors of transfer are outside the control of the trainer and trainees. Also, he concluded that “although there are some significant relationships across studies, there are surprisingly few consistently strong predictors of transfer” (Blume et al., 2010). Kauffeld and Lehmann-Willenbrock (2010) also advocated that there is a need to put more efforts on training transfer.

Researchers have emphasized that the training transfer should be assessed before the training programs in order to know about the possible transfer-inhibiting factors before training starts (Holton and colleagues, 2000; Bates et al., 2007). This would help organisations to overcome possible training transfer related issues before investing money in the training initiatives (Holton & Baldwin, 2003). Furthermore, Naquin and Baldwin (2003) pointed out that the conditions under which participants enter the training are among the most important influencing factors on transfer outcomes.

Interestingly, most of the empirical research work on pre-training antecedents of training outcomes have focused more on individual related factors than the organisational factors. (Baldwin and Magjuka, 1991, Alvarez et al., 2004). Hence, the purpose of this paper is to

highlight the role and importance of organisational factors such as training transfer climate, training assessment mechanism, training participation and involvement and training awareness, which are proposed to contribute to the training transfer theory.

Organizational literature highlighted that employee motivation can be profoundly affected by various management actions that, either intentionally or unintentionally, send salient cues or signals to the employees (Feldman and March, 1981; Pfeffer, 1981). Hicks and Klimoski, (1987) also pointed out that little research has been done to identify or understand the implications of the management actions or signals attached to organizational training initiatives. Other researchers such as (Ford and Weissbein, 1997) recommended that researchers need to explore transfer not just from an individual perspective but also from departmental, subunit, and organizational perspectives. Alvarez, Salas, and Garofano (2004) also reviewed a decade of research on training evaluation and training effectiveness and highlighted that organisational issues have been investigated less thoroughly than that of individual and training related characteristics. Further, Haque and Singh (2011) also pointed out the need for research on impact of organisational characteristics on training effectiveness.

Training transfer plays an important role in increasing the effectiveness as well as ROI (return on investment) of training. Previous research studies clearly highlights that there is need to pay larger attention on training transfer issues at the workplace. Though there are various factors that influence training transfer, individual and training design related actors are studied at length by various researchers in the past. Hence this study focuses on organisational or environmental factors, which influence training transfer at the workplace. The author predicts that organisational factors or management actions (training awareness, training involvement and participation, training assessment/evaluation, and transfer climate) prior to training plays an important role and influence training transfer at the workplace.

Training Transfer

Training transfer is defined as ‘the degree to which trainees effectively apply the knowledge, skills, and attitudes gained in a training context to the job’ (Baldwin and Ford, 1988). Blume et al. (2010) defined training transfer as the extent to which knowledge and skill acquired in a learning setting can be applied at the workplace and maintained over time. The transfer is a behavioural measure of training evaluation and is one of the most important among all training effectiveness criteria’ (Saks and Haccoun 2004a, 2007b; Park & Wentling, 2007).

However, among all the studies, Baldwin and Ford's (1988) model is the most cited work in the transfer literature (Blume et al. 2010). This along with various other research studies (e.g. Ford & Weissbein, 1997; Burke & Hutchins, 2007; Baldwin et al., 2009; Grossman & Salas, 2011) has projected training transfer as one of the most important and active areas of training research. In addition, Holton's (1996) research work in the form of Learning Transfer System Inventory (LTSI) model adds great value in the transfer of training literature.

Previous studies related to training transfer mainly focused on various variables affecting the impact on transfer as well as the interventions intended to enhance transfer (Aguinis and Kraiger, 2009). Scanning of literature on training transfer categorising it into three major areas; trainee characteristics, training design, and work environment (Yamhill and McLean, 2001; Clarke, 2002; Hutchins, 2007; Brown & McCracken, 2009; Martin, 2010; Blume et al., 2010). Out of these three factors related to training transfer, the work environment factor has received the least attention by researchers (Cheng and Ho, 2001; Burke and Hutchins, 2007; Brown and McCracken, 2009). This is certainly a neglected area and one in which much more work is needed (Salas & Bowers, 2001)

Among all the organisational dimensions researched, researchers (such as Xiao, 1996; Olsen, 1998; Holton et al., 2000; Homklin, Takahashi and Techakanont, 2013) have pointed out social support as one of the most important work environment variables for transfer of training and have shown strong relationship between social support and transfer of training. However, scanning of the literature reveals that research related to the supportive environment is not very consistent as many other researchers (such as Tziner, Haccoun, and Kadish, 1991; Rouiller & Goldstein, 1993; Van der Klink, Gielen, & Nauta, 2001) have highlighted insignificant relationships between a supportive environment and transfer of training.

Therefore, taking lead from previous researchers, author propose that organisational factors (other than training transfer climate) such as awareness about the training initiatives, employees participation and involvement in training activities (Baldwin & Magjuka, 1991; Biswas, 1998), and training assessment mechanism might contribute to a better understanding of the organisational environment aspects that affect transfer of training.

Organisational Factors

Training Transfer climate

Training transfer climate is described as those aspects of the work environment that influence training transfer (Ford et al., 1992; Rouiller & Goldstein, 1993; Tracey et al., 1995; Salas and Cannon-Bowers, 2001). Environmental factors as organizational procedures, reward systems and acceptance of new skills by supervisors and peers can affect an individual's motivation to transfer (Kontoghiorghes C, 2001; Sue et al., 2013). The transfer climate is a multidimensional construct (Mathieu, Tannenbaum, & Salas, 1992). It is one of the most widely discussed and intensively studied environmental factors in training transfer research (Yamnill & Mclean, 2001; Burke & Hutchins, 2007; Gegenfurtner, Veermans, Festner, & Gruber 2009; Grossman & Salas, 2011). Among the various organisational factors, transfer climate was found to have the strongest relationship with the transfer (Blume et al., 2010; Martin, 2010; Hauer et al., 2012). Arguably, the most complex but least understood factors in facilitating training transfer are those in the work environment (Cromwell and Kolb, 2004).

The model proposed by Noe (1986) suggests that environmental favourability affects the transfer of learned skills. Perceived social support for the training was found to be the key variables in this model. Various researchers have focused on understanding and identifying different aspects of the transfer climate that have an impact on transfer of training. Kontoghiorghes (2001) predicted that positive climate is very important in the transfer of training to occur. Similarly, Tracey et al. (1995) paper highlighted that the work environment essentially plays a crucial role in determining training effectiveness. Another study conducted by Rouiller & Goldstein (1993) also pointed out that positive transfer climate prompts trainees to use new skills, and be aware of consequences for using the skills correctly and remediation for not using skills. Several research studies have highlighted the positive influence of training transfer climate on transfer of training (Colquitt et al., 2000; Smith-Jentsch et al., 2001; Cromwell & Kolb, 2004)

Various aspects of training transfer climate investigated by previous research studies are; peer support and supervisor support (Xiao, 1996; Seyler, et. al, 1998; Smith-Jentsch et al., 2001; Cromwell & Kolb, 2004), situational cues (Rouiller & Goldstein, 1993; Tracey et al., 1995), and the opportunity to perform (Ford et al., 1992). Among all these variables, supervisor support has been found to be the most important predictor of transfer of training. Supervisor support is the extent to which supervisors reinforce and support the practice of newly learned

things acquired in training on the job (Tracey et al., 1995; Xiao, 1996; Holton et al., 1997; Birdi et al., 1997; Burke and Hutchins, 2007). Supervisors may encourage employees to transfer newly learned skills to the workplace not by encouraging them but also by providing them the necessary support to implement.

Broad and Newstrom (1992) also suggested that supervisors can considerably impact transfer of training to the workplace provided they behave in ways congruent with the training objectives. Organizations, in order to increase their return on investment on training, may develop strategies that encourage leaders to reinforce transfer attempts positively (Smith-Jentsch et al., 2001).

These studies suggest that climate should be taken care before applying any transfer intervention to increase application of knowledge and skill.

Hypothesis 1: Training transfer climate has a positive effect on perceived training transfer.

Training Awareness

Training awareness refers to the information provided to the employees/trainees before training. It includes awareness related to training initiatives, training policy, details about the training programs, training calendar, programme objectives, expectations from the programme, benefits of attending such training programs, etc. It also includes how the participants or trainees are informed about the training. An advance information about the training programs that highlights “follow-up” increases trainees’ intention to use what they have learned (Baldwin and Magjuka, 1991). Whereas, failure to provide appropriate information to trainees prior to training may send a negative signal regarding the importance of the training initiative (Baldwin and Magjuka, 1991). Training awareness in the form of pre-training information reduces participant’s anxiety (Martocchio, 1992). Communication prior to training is a soft spot in organizational settings (Salas et al., 2012). Hicks and Klimoski (1987) also suggested that pre-training information can influence trainees’ expectations.

A study conducted by Baldwin and Magjuka (1991) pointed out that around one-third of the respondents only indicated that they received information prior to training via communication with supervisors, upper management, or the training department/coordinators. Their study

concluded that trainees' reported greater intentions to transfer learning to the workplace when they received information prior to the training program.

Though most of the previous studies have ignored this variable, we propose that by providing proper and effective information/communication prior to training influences training transfer. Communication should focus on the benefits of training and not on (alleged) deficits of learners.

Hypothesis2: Training awareness has a positive effect on perceived training transfer

Training Participation and Involvement

Training participation and involvement refer to the involvement of employees in the training process. The idea is that if they are getting involved in the training processes/activities, the sense of ownership may increase. Previous researchers have highlighted that trainees' involvement in the decision is likely to increase acceptance of the decision (Kiesler, 1971; Salanick, 1977; Sofo, 2007). Study conducted by Kodwani and Singh, 2004 highlighted that most often the nominations of participants to various training programmes are done as by the HRD centre or the head of the department and the individuals are not involved in it. A study conducted by Johnson, McLaughlin, and Zimmerle (1988) found that less than 65 percent of the organisations studies (611 in number) conducted any form of needs assessment prior to training. Need assessment is also one of the ways of involving participants/trainees' in the training. Baldwin and Magjuka (1991) highlighted that organizations are often embarking on training without a process of data gathering and trainee involvement. Also, previous research studies have shown that acceptance of decision is higher in the case of participation in decision making as compared to instances where such participation is absent (Hicks and Klimoski, 1987; Wagner & Gooding, 1987; Baldwin, Magjuka, and Loher, 1991; Sofo, 2007). Baldwin, Magjuka, and Loher (1991) reported that in the context of training, participants who were consulted and were allowed to attend the type of program they requested, showed a higher level of motivation to learn (Wexley & Latham, 1981). Salancik (1977) also suggested that increased commitment occurs under conditions of participation and choice. Knowles (1987) pointed out that Choice and involvement in the selection of training are potent motivators. Baldwin, Magjuka, & Loher (1991) suggested that trainees should be consulted to ensure that they feel ownership in training.

Hicks & Klimoski (1987) reported that participation in training increases trainee's belief that training is appropriate and also increases trainees' satisfaction with training. Biswas (1998) highlighted the importance of involvement of the potential participants in the training decision and recommended that organisations should have a formal mechanism where the employees can participate freely in the training decision before they are actually nominated for the programme. Lack of involvement and participation often leads to psychological rejection of the training programme in the minds of the participants which further leads to their minimal involvement and participation in the programme. Yardley, 2003 pointed out that voluntary participation contributes more in explaining training transfer than the mandatory participation.

Based on the available literature we propose that Training participation and involvement in training decision process will affect training transfer.

Hypothesis3: Training participation and involvement will have a significant and positive effect on perceived training transfer.

Training Assessment Mechanism

Training assessment mechanism refers to the presence of a systematic arrangement for evaluating training programs after the training. It can be immediately after the training or after few months of the training imparted. This would help in fixing accountability of the trainees'. This is another organisational variable which is understudied (Burke and Hutchins, 2007). It is defined as the degree to which the organization or management expects trainees' to use learned skills and knowledge on the job and also holds them responsible for doing so (Brinkerhoff & Montesino, 1995; Kontoghiorghes, 2002). In this way management signals trainees' that training is important (Baldwin, Magjuka, and Loher, 1991). By creating a formal evaluation mechanism management signals that there will be an assessment of transfer, which further makes trainers, trainees, and all other associated, accountable for training success (Bates, 2003). This helps in projecting the importance of learning and its application to the job (Bates, 2003; Broad, 2005; Broad & Newstrom, 1992).

The primary learning imperative to increase the transfer of training is enhancing accountability for application such as requiring a trainee's report after training (Longnecker, 2004; Saks and Belcourt, 2006).

Thus, we propose that the presence of a formal training assessment mechanism may have a positive effect on training transfer as it fixes accountability of the trainees'.

Hypothesis4: Presence of training assessment mechanism will have a positive effect on perceived training transfer.

Based on the literature scanning and the proposed hypothesis, the proposed model for this study includes four independent variables and one dependent variable.

-----Pl. insert figure 1 here---

Methodology

Sample: Participants included 145 managers employed in a large public sector organisation operating in India. Out of these respondents, 22 did not complete a post-training survey, providing a final sample size of 123 managerial level personnel working at various management positions within the organisation (e.g., Production, finance, human resources, administration, etc.). Eighty-one percent of the participants were male, and the average age was 42. The average job tenure with this organisation was 8.25 years.

Data were collected in two phases. In the first phased data were collected before one of the training and in the second phase data were collected after one month of the training. The independent variables (training awareness, training transfer climate, training participation and involvement, training assessment mechanism) were collected in the first phase, whereas, data related to dependent variable i.e. training transfer was collected in the second phase.

To minimise common method variance we used both procedural and statistical measures (Podsakoff, et al., 2012) All the participants were informed that the purpose of the survey was to have a better understanding of training initiatives and to improve our understanding of training transfer. Participants were assured that their responses were anonymous and will be kept confidential, and would only be seen by the researcher. Participants were requested to answer the survey questions as accurately as possible with respect to training programs they have attended in the recent past.

Measures

To test the hypotheses of this study, respondents completed a self-report pre-training survey, measuring training awareness, training transfer climate, training participation and involvement, and training assessment/evaluation. Thirty days later (after the programme was

over), trainees were approached for another self-report measure assessing perceived training transfer. Respondents who completed the pre and post-training survey assessing perceptions of training transfer were only used for analyses. Following measures were used for the study:

Transfer Climate

Transfer climate was measured with the help of 15-item General Training Climate Scale (GTCS) developed by Tracey and Tews (2005). The Cronbach's alpha of this measure was 0.796. Trainees were asked to indicate their agreement with each item on a 5-point scale ranging from strongly disagree (1) to strongly agree (5).

Training Transfer

Perceived training transfer was measured with six items adopted from Xiao (1996). A sample item is: 'I can accomplish the tasks better by using the new knowledge acquired from the training course'.

Training Awareness

A seven-item scale to measure training awareness was adopted from previous research studies (Hicks and Klimoski, 1987; Baldwin and Magjuka, 1991; Salas et al., 2012). These items assessed the extent to which the participants are aware of the training practices of the organisation, have information about the training calendar, training objectives, expectations from training, communication (if any) that they receive prior to training and the source of communication.

Training Participation and Involvement

Training Participation and involvement was measured with a 4-item scale adapted from previous research studies (Wexley & Latham, 1981; Hicks and Klimoski, 1987; Baldwin & Magjuka, 1991; Baldwin, Magjuka, and Loher, 1991; Sofo, 2007). Example items included "I was involved in my training needs identification process" and "I was consulted before nomination for the said programme".

Training Assessment/Evaluation

A three-item scale to measure training assessment mechanism was drawn from previous research (Baldwin, Magjuka, and Loher, 1991; Bates, 2003; Longnecker, 2004; Saks and Belcourt, 2006). Participants were asked options including preparing a report or summary of

the training, meeting with the supervisor, attending a follow-up assessment, or no post-training behaviour at all. The purpose was to know whether there is presence of any perceived accountability associated with post-training outcomes. All measures were assessed using a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree)

-----Pl. Insert Table 1 here-----

On the individual level, we controlled for gender and age.

Result

-----Pl. Insert Table 2 here-----

Table 1 presents the mean, standard deviation, and inter-correlations of the study variables. Training assessment mechanism was found weak as the respondents reported that overall, rarely to sometimes training programs are evaluated in their organization (M= 2.81). Perceived training transfer was found positively and significantly related to all the independent variables at $p < .001$. Among all the independent variables, training transfer was found strongly related to training transfer climate. This confirms our hypothesis 1, 2, 3, and 4.

The inter-correlations among the variables indicate only the nature and strength of relationships. Regression analysis was carried out to demonstrate the relative predictive value of each of the predictors. Cohen and Cohen (1975) have suggested that regression analysis is fruitful when inter-correlation shows some commonality in the relationship among variables. The result of regression analysis predicting training transfer is presented in table 2.

-----Pl. Insert Table 3 Here ----

The regression analysis has yielded results on (1) the most potent predictors, (2) individuals positive and negative contribution in the hierarchical order with the level of significance, (3) the total percentage of variance R^2 that all the predictors together explain. The predictors were not presented in any prearranged order and their order was only churned out by the computer itself. The result of multiple regression is presented below:

The result reveals that the most important predictor of positive identification with training transfer was training transfer climate which explained 23.8% variance in training transfer. Training participation and involvement entered the regression equation at the second step and

added 21.2% of the variance, which confirms our third hypotheses that training participation and involvement will have a strong and positive effect on training transfer. Training assessment mechanism entered the regression equation at the third step and added 12.4% of the variance, which confirms our fourth hypotheses. Finally, training awareness was found to be the last predictor to enter the regression equation which explained 10.3 % out of total 67.1 % variance, which confirms our second hypotheses. From the regression analysis result, it is clearly evident that the training transfer climate emerged out as the most influential variable that affected trainees' perceived learning transfer. This proves our first hypothesis that training transfer climate contributes a significant amount of the variance in the transfer of training.

Discussion and Conclusions

This study hypothesized that the training awareness, training transfer climate, training participation and involvement, training assessment mechanism would be positively correlated with perceived training transfer. The result clearly supports all the four hypotheses. Training transfer climate and training participation and involvement were indeed significantly correlated with training transfer. Similarly, the results also revealed that training assessment and training awareness were positively related to perceived transfer of training. Though training awareness explained only 10.3 percent variance in the training transfer. The results of this study are in tune with the previous research studies (Baldwin and Magjuka, 1991; Rouiller & Goldstein, 1993; Tracey et al., 1995; Xiao, 1996; Sofo, 2007; Blume et al., 2010; Salas et al., 2012).

The results of this study extend research on both the transfer of training and pre-training factors. The study found that organizational factors which are under the control of management have a positive impact on transfer of training. This study provides support for the original model of inter-relationships between pre-training factors and perceived transfer of training. All the organisational/pre-training factors were positively and significantly correlated with the perceived training transfer.

Study revealed that when trainees' are aware of the training practices of the organisation, receives prior information about the training programs and their objectives, expectations from them after the training and the benefits of the training program to be attended, they are motivated and understand their role, which reduces trainee anxiety (Martocchio, 1992). Prior communication sends a positive signal to the employees or trainees that the management is

serious about the training and also highlights the role and importance of the training in the organisation. It is, after all, as a human being we are always selective about what we believe to be relevant or meaningful. Similarly, training assessment mechanism put some kind of pressure on the trainees before the training and ensures some amount of accountability on the trainees' part. The presence of training assessment mechanism motivates trainees to be more serious about the training as they are required to demonstrate/report some change after the training.

Training participation and involvement were found strongly and positively related to training transfer. Involvement increases the acceptability and sense of ownership among the trainees towards training as they are involved and consulted (Hicks and Klimoski, 1987; Baldwin, Magjuka, and Loher, 1991; Sofo, 2007). Involvement also increases trainee's commitment and motivation towards training (Wexley & Latham, 1981) which is a necessary element of training transfer.

Among all the organisational factors studies, training transfer climate emerged as the most important variable influencing training transfer. The earlier research studies also pointed out training transfer climate as an important predictor of training transfer (Rouiller & Goldstein, 1993; Tracey et al., 1995; Xiao, 1996; Seyler, et al., 1998; Cromwell & Kolb, 2004). Thus, positive transfer climate motivates trainees to put more efforts to learn and to transfer the training. It may provide necessary social support as well as opportunities to apply newly learned things on the job.

Managerial Implications

The purpose of this study was to understand the role of various organisational factors on training transfer. Organisational factors were chosen for this study as they are under the control of management as compared to most of the individual factors. If organizations are aware about antecedents of motivation to transfer, they can facilitate the training transfer better (Gegenfurtner, Veermans, et al., 2009) as well as are able to maximise the benefit of training programs (Laker & Powell, 2011). Organisations can plan well in advance to have these factors in place and can enhance training transfer, which is currently around 10 percent (Holton & Baldwin, 2000).

First of all organisation should work on improving training awareness among the employees. In this way employees would be aware about the new training initiatives taken by the organisation, existing training policy, nomination process, training calendar, programme objectives, and the expected outcome from the training. This would further reduce any kind of uncertainty and anxiety among the participants as they are well informed about the details pertaining to training objectives, content, and what is expected out of them post training. This will ensure their involvement and will boost their morale. Organisations should ensure that employees are consulted time to time and their training needs and other concerns related to training are taken appropriately during the training need identification process. Organisation need to ensure that the employees should have some say in the training nomination process. This increases their pre training motivation.

Appropriate assessment mechanism to evaluate training after the training is over, encourages participants to learn and to transfer newly learned things at workplace as it increases accountability on the trainees' part. If people are aware about what is expected out of them after the training is over and they will be evaluated for the same, generally encourages them to put their best efforts towards learning as well as application of that learning. White & Branch (2001) clearly pointed out that training evaluation increases training transfer. Burke and Saks (2009) also pointed out evaluation as the single most important strategy to ensure accountability and improve training transfer. Hence, organisations should ensure a well-defined training evaluation mechanism in place based on the Kirkpatrick's four level evaluation model.

In order to ensure good transfer climate, organizations should design appropriate interventions to train supervisors and peers so that they can provide necessary support and motivate employees to transfer their newly learned skills at the workplace. Bhatti et al. (2014) highlighted that supervisors and peers should be encouraged and trained to play an active role in supporting and guiding these participants to implement newly learned things at the workplace to enhance training transfer. Supervisors should discuss with the employees who have undergone training, ways to apply and generalize knowledge gained from the training. In order to ensure this, organisation can design appropriate reward and recognition mechanism to encourage peers and seniors to play their crucial role.

Study Limitations

Although we cannot completely rule out the possibility of method bias, we tried our best to minimise any such error in our study. The survey was conducted with the help of personal interaction with each of the respondents and their identity was kept completely confidential. Another limitation of this study was the use of single respondents, which have been found to contain measurement error. However, this is less likely when knowledgeable respondents are used for the study purpose (Wright et al., 2001). In our study, the participants were managerial level personnel from various departments with considerable experience in their respective position and organization.

Consistent with typical limitations with self-report measures (e.g. social desirability) apply to our study as well. The future study should include a large sample size.

Future Research Directions

Future research might investigate the extent to which not only trainees, even other training stakeholders such as trainers and supervisors, feel accountable and responsible for training and its transfer. This would provide a stronger test of the accountability hypothesis. It would also be worthwhile to study what type of evaluation/assessment mechanism would be more appropriate for training transfer. Probably the relationship between training assessment and training transfer might be better if the assessment is accompanied with rewards and recognition, as highlighted by Taylor et al. (2005). Thus, future research should explore the effects of assessment on training transfer when it is combined with rewards or recognition. Future research studies may also look at the role of evaluation/assessment feedback in training transfer. Finally, the mediating or moderating role of some of the organisational factors can also be considered for future research work.

Reference

- Alvarez, K., Salas, E. and Garofano, C. M. (2004). An integrated model of training evaluation and effectiveness. *Human Resource Development Review*, 3, pp.385–416
- Aguinis, H. and Kraiger, K., 2009. Benefits of training and development for individuals and teams, organizations, and society. *Annual review of psychology*, 60, pp.451-474.

- Arthur Jr, W., Bennett Jr, W., Edens, P.S. and Bell, S.T., 2003. Effectiveness of training in organizations: a meta-analysis of design and evaluation features. *Journal of Applied psychology*, 88(2), pp.234.
- Baldwin, T.T. and Ford, J.K., 1988. Transfer of training: A review and directions for future research. *Personnel psychology*, 41(1), pp.63-105.
- Baldwin, T.T. and Magjuka, R.J., 1991. Organizational training and signals of importance: Linking pretraining perceptions to intentions to transfer. *Human Resource Development Quarterly*, 2(1), pp.25-36.
- Baldwin, T.T., Ford, J.K. and Blume, B.D., 2009. Transfer of training 1988–2008: An updated review and agenda for future research. *International review of industrial and organizational psychology*, 24, pp.41-70.
- Baldwin, T.T., Magjuka, R.J. and Loher, B.T., 1991. The perils of participation: Effects of choice of training on trainee motivation and learning. *Personnel psychology*, 44(1), pp.51-65.
- Bates, R.A., 2003. Training transfer: Progress and prospects. *Critical issues in HRD*, pp.179-197.
- Bates, R., Kauffeld, S & Holton, E 2007. Examining the factor structure and predictive ability of the German-version of the learning transfer system inventory LTSI. *Journal of European Industrial Training*, 3(13), pp195-211.
- Becker, B., Huselid, M. and Ulrich, D., 2001. HR as a strategic partner: The measurement challenge. *The HR scorecard: Linking people, strategy, and practice*, pp.1-26.
- Berry, M. L., & Morris, M. L. (2005). Organizational factors impacting sexual harassment prevention programs. In M. L. Morris & F. Nafuko (Eds.), Proceedings of the 2005 Academy of Human Resource Development Annual Conference (pp. 1271–1278). Estes Park, CO: Academy of HRD.
- Bhatti, M. A., Ali, S., Isa, M., Faizal, M. and Battour, M. M. (2014). Training transfer and transfer motivation: the influence of individual, environmental, situational, training design, and affective reaction factors. *Performance Improvement Quarterly*, 27(1), 51–82.
- Birdi, K., Allan, C. and Warr, P., 1997. Correlates and perceived outcomes of 4 types of employee development activity. *Journal of Applied Psychology*, 82(6), p.845.
- Biswas, S.N., 1998. Factors Affecting Training Effort: Influence of Involvement, Credibility, Utility and Training Transfer Climate. *Indian Journal of Industrial Relations*, pp.313-328.

- Blume, B.D., Ford, J.K., Baldwin, T.T. and Huang, J.L., 2010. Transfer of training: A meta-analytic review. *Journal of Management*, 36(4), pp.1065-1105.
- Brinkerhoff, R.O. and Montesino, M.U., 1995. Partnerships for training transfer: Lessons from a corporate study. *Human Resource Development Quarterly*, 6(3), pp.263-274.
- Broad, M.L. and Newstrom, J.W., 1992. *Transfer of Training: Action-Packed Strategies To Ensure High Payoff from Training Investments*. Corporate and Professional Publishing Group, Addison-Wesley Publishing Co., One Jacob Way, Reading, MA 01867.
- Brown, T.C. and McCracken, M., 2009. Building a bridge of understanding: How barriers to training participation become barriers to training transfer. *Journal of European Industrial Training*, 33(6), pp.492-512.
- Burke, L.A. and Baldwin, T.T., 1999. Workforce training transfer: A study of the effect of relapse prevention training and transfer climate. *Human resource management*, 38(3), pp.227-241.
- Burke, L.A. and Hutchins, H.M., 2007. Training transfer: An integrative literature review. *Human resource development review*, 6(3), pp.263-296.
- Burke, L.A. and Hutchins, H.M., 2007. Training transfer: An integrative literature review. *Human resource development review*, 6(3), pp.263-296.
- Burke, L. A., & Saks, A. M. (2009). Accountability in training transfer: Adapting Schlenker's model of responsibility to a persistent but solvable problem. *Human Resource Development Review*, 8(3), pp.382-402
- Cheng, E.W. and Ho, D.C., 2001. A review of transfer of training studies in the past decade. *Personnel review*, 30(1), pp.102-118.
- Clarke, N., 2002. Job/work environment factors influencing training transfer within a human service agency: Some indicative support for Baldwin and Ford's transfer climate construct. *International journal of training and development*, 6(3), pp.146-162.
- Cohen, J. & Cohen, P. (1975). *Applied multiple correlation/regression analysis for the social sciences*. New York: Wiley
- Colquitt, J.A., LePine, J.A. and Noe, R.A., 2000. Toward an integrative theory of training motivation: a meta-analytic path analysis of 20 years of research. *Journal of applied psychology*, 85(5), p.678.
- Cromwell, S.E. and Kolb, J.A., 2004. An examination of work-environment support factors affecting transfer of supervisory skills training to the workplace. *Human resource development quarterly*, 15(4), pp.449-471.

- Feldman, M.S. and March, J.G., 1981. Information in organizations as signal and symbol. *Administrative science quarterly*, 26(2), pp.171-186.
- Fitz-Enz, J. and B. Davison (2002). How to measure human resources management. New York: McGraw-Hill.
- Ford, J.K. and Weissbein, D.A., 1997. Transfer of training: An updated review and analysis. *Performance improvement quarterly*, 10(2), pp.22-41.
- Ford, J.K. and Weissbein, D.A., 1997. Transfer of training: An updated review and analysis. *Performance improvement quarterly*, 10(2), pp.22-41.
- Ford, J.K., Quiñones, M.A., Segó, D.J. and Sorra, J.S., 1992. Factors affecting the opportunity to perform trained tasks on the job. *Personnel psychology*, 45(3), pp.511-527.
- Gegenfurtner, A., Veermans, K., Festner, D. and Gruber, H., 2009. Motivation to transfer training: An integrative literature review. *Human Resource Development Review*, 8(3), pp.403–423.
- Geilen, E.W., 1996. Transfer of training in corporate setting: testing a mode. In *Proceedings of the 1996 Academy of Human Resource Development Annual Conference*. Austin, TX: Academy of HRD.
- Georgenson, D. L. (1982). The problem of transfer calls for partnership. *Training and Development Journal*, 36, 75–78.
- Green, M. and McGill, E., 2011. The 2011 state of the industry: increased commitment to workplace learning. *The American Society for Training and Development*, available at: www.astd.org/TD/Archives/2011/Nov/Free/Nov_11_Feature_State_of_the_Industry.htm (accessed March 2016).
- Grossman, R. and Salas, E., 2011. The transfer of training: what really matters. *International Journal of Training and Development*, 15(2), pp.103-120.
- Hauer, E., Nordlund, A.M. and Westerberg, K., 2012. Developmental intervention, learning climate and use of knowledge in elderly care. *Journal of Workplace Learning*, 24(1), pp.19-33.
- Haque, M. I., Singh, A. K., & Arvind. (2011). Impact of organisational learning on transfer of training. Paper presented at the 34-42. Retrieved from <http://search.proquest.com/docview/1015681568?accountid=49670>.
- Hicks, W.D. and Klimoski, R.J., 1987. Entry into training programs and its effects on training outcomes: A field experiment. *Academy of management journal*, 30(3), pp.542-552.

- Holton E (2000) The Learning Transfer System Inventory (LTSI) translated into French: Internal structure and predictive validity. *International Journal of Training and Development* 11: Blackwell Publishing Limited.
- Holton, E.F. and Baldwin, T.T., 2000. Making transfer happen: An action perspective on learning transfer systems. *Advances in Developing Human Resources*, 8(2), pp.1-6.
- Holton, E, Bates, R & Ruona, 2000. Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, 11(4), pp.333–360.
- Holton, E. F., III, & Baldwin, T. T. (2003). Making transfer happen. In E. F.Holton III, & T. T. Baldwin (Eds.), *Improving learning transfer in organizations* (pp. 3–15). San Francisco, CA: Jossey-Bass.
- Homklin, T., Takahashi, Y. and Techakanont, K., 2013. Effects of Individual and Work Environment Characteristics on Training Effectiveness: Evidence from Skill Certification System for Automotive Industry in Thailand. *International Business Research*, 6(12), pp.1-16
- Huselid, M.A., 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of management journal*, 38(3), pp.635-672.
- Hutchins, H.M. and Burke, L.A., 2007. Identifying trainers' knowledge of training transfer research findings—closing the gap between research and practice. *International Journal of Training and Development*, 11(4), pp.236-264.
- Hutchins, H.M., Burke, L.A. and Berthelsen, A.M., 2010. A missing link in the transfer problem? Examining how trainers learn about training transfer. *Human Resource Management*, 49(4), pp.599-618.
- Kauffeld, S. and Lehmann-Willenbrock, N., 2010, “Sales training: effects of spaced practice and training transfer”, *Journal of European Industrial Training*, Vol. 34 No. 1, pp. 23-37.
- Kiesler, C.A., 1971. *The psychology of commitment: Experiments linking behavior to belief*. Academic Press.
- Kitching, J. & Blackburn, R., 2002. The nature of training and motivation to train in small firms (Research Report No. 330) (London, Department for Education and Skills), available at <http://dera.ioe.ac.uk/4691/1/RR330.pdf> (accessed March 2016).
- Knowles, M. S., 1987. *Adult learning: Training and development handbook*. New York: McGraw-Hill.

- Kodwani, A. D., & Singh, M. (2004). Towards Effective Training and Development in Indian Public Sector Enterprises: A Case-based Analysis. *South Asian Journal of Management*, 11(3), 36.
- Kontoghiorghes, C., 2001. Factors affecting training effectiveness in the context of the introduction of new technology—a US case study. *International Journal of Training and Development*, 5(4), pp.248-260.
- Kontoghiorghes, C., 2002. Predicting motivation to learn and motivation to transfer learning back to the job in a service organization: A new systemic model for training effectiveness. *Performance Improvement Quarterly*, 15(3), pp.114-129.
- Kupritz, V.W., 2002. The relative impact of workplace design on training transfer. *Human resource development quarterly*, 13(4), pp.427-447.
- Laker, D. R. , & Powell, J. L. (2011). The differences between hard and soft skills and their relative impact on training transfer. *Human Resource Development Quarterly*, 22(1), pp.111–122.
- Lancaster, S., Di Milia, L. and Cameron, R., 2013. Supervisor behaviours that facilitate training transfer. *Journal of Workplace Learning*, 25(1), pp.6-22.
- Lim, D.H. and Morris, M.L., 2006. Influence of trainee characteristics, instructional satisfaction, and organizational climate on perceived learning and training transfer. *Human Resource Development Quarterly*, 17(1), pp.85-115.
- Longenecker, C.O., 2004. Feature articles Maximizing transfer of learning from management education programs: Best practices for retention and application. *Development and Learning in Organizations: An International Journal*, 18(4), pp.4-6.
- Manju, S. and Suresh, B. H. (2013) Factors Influencing Transfer of Training in the Indian Manufacturing Sector. *Training & Development Journal*, 4 (2). pp. 90-99.
- Martin, H.J., 2010. Workplace climate and peer support as determinants of training transfer. *Human Resource Development Quarterly*, 21(1), pp.87-104.
- Martocchio, J.J., 1992. Microcomputer usage as an opportunity: The influence of context in employee training. *Personnel Psychology*, 45(3), pp.529-552.
- Mathieu, J.E., Tannenbaum, S.I. and Salas, E., 1992. Influences of individual and situational characteristics on measures of training effectiveness. *Academy of management journal*, 35(4), pp.828-847.

- Miller, L., 2012. ASTD 2012 State of the industry report: organizations continue to invest in workplace learning. *Training & Development Magazine*, 66(11), pp.42-48.
- Naquin, S. S., & Baldwin, T. T. (2003). Managing transfer before learning begins: The transfer-ready learner. In E. F. Holton III & T. T. Baldwin (Eds.), *Improving learning transfer in organizations* (pp. 80-96). San Francisco: Jossey-Bass.
- Noe, R. A. (2002). *Employee Training and Development*, New York: McGraw-Hill Irwin.
- Noe, R.A., 1986. Trainees' attributes and attitudes: Neglected influences on training effectiveness. *Academy of management review*, 11(4), pp.736-749.
- Olsen Jr, J.H., 1998. The evaluation and enhancement of training transfer *International journal of training and development*, 2(1), pp.75-75.
- Park, Ji-Hye, & Wentling, T., 2007. Factors associated with transfer of training in workplace e-learning, *Journal of Workplace Learning*, 19(5), pp.311 – 329.
- Pareek, U., & Lynton, R. P. (2011). *Training for development*. New Delhi, India: Sage
- Pfeffer, J., 1981. *Power in Organizations*. Marshfield, MA: Pitman.
- Podsakoff, P.M., MacKenzie, S.B. and Podsakoff, N.P., 2012. Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology*, 63, pp.539-569.
- Chauhan, R., Ghosh, P., Rai, A., & Shukla, D. (2016). The impact of support at the workplace on transfer of training: a study of an Indian manufacturing unit. *International Journal Of Training & Development*, 20(3), 200-213.
- Rouiller, J.Z. and Goldstein, I.L., 1993. The relationship between organizational transfer climate and positive transfer of training. *Human resource development quarterly*, 4(4), pp.377-390.
- Saari, L.M., Johnson, T.R., McLaughlin, S.D. and Zimmerle, D.M., 1988. A survey of management training and education practices in US companies. *Personnel Psychology*, 41(4), pp.731-743.
- Saks AM, Haccoun RR. (2004). *Managing performance through training and development* (3rd ed.). Scarborough, Ontario: Nelson.
- Saks, A. and Haccoun, R. (2007). *Managing Performance through Training and Development*, Toronto, Nelson and Thompson Ltd..
- Saks, A.M. and Belcourt, M., 2006. An investigation of training activities and transfer of training in organizations. *Human resource management*, 45(4), pp.629-648.

- Salancik, G.R., 1977. Commitment and the control of organizational behavior and belief. *New directions in organizational behavior*, 1, p.54.
- Salas, E. and Cannon-Bowers, J.A., 2001. The science of training: A decade of progress. *Annual review of psychology*, 52(1), pp.471-499.
- Salas, E. and Cannon-Bowers, J.A., 2001. The science of training: A decade of progress. *Annual review of psychology*, 52(1), pp.471-499.
- Seyler, D.L., Holton III, E.F., Bates, R.A., Burnett, M.F. and Carvalho, M.A., 1998. Factors affecting motivation to transfer training. *International Journal of Training and Development*, 2(1), pp.16-16.
- Smith-Jentsch, K.A., Salas, E. and Brannick, M.T., 2001. To transfer or not to transfer? Investigating the combined effects of trainee characteristics, team leader support, and team climate. *Journal of applied psychology*, 86(2), p.279.
- Sofo, F., 2007. Transfer of training: a case-study of outsourced training for staff from Bhutan. *International Journal of Training and Development*, 11(2), pp.103-120.
- Sue L., Lee Di M., & Roslyn C. (2013) Supervisor behaviours that facilitate training transfer, *Journal of Workplace Learning*, 25 (1), pp.6 – 22.
- Taylor, P. J., Russ-Eft, D. F., & Chan, D. W. L. (2005). A meta-analytic review of behavior modeling training. *Journal of Applied Psychology*, 90(4), 692–709.
- Tracey, J.B. and Tews, M.J., 2005. Construct validity of a general training climate scale. *Organizational Research Methods*, 8(4), pp.353-374.
- Tracey, J.B., Hinkin, T.R., Tannenbaum, S. and Mathieu, J.E., 2001. The influence of individual characteristics and the work environment on varying levels of training outcomes. *Human resource development quarterly*, 12(1), p.5.
- Tziner, A., Haccoun, R.R. and Kadish, A., 1991. Personal and situational characteristics influencing the effectiveness of transfer of training improvement strategies. *Journal of Occupational Psychology*, 64(2), pp.167-177.
- Van der Klink, M., Gielen, E. and Nauta, C., 2001. Supervisory support as a major condition to enhance transfer. *International journal of training and development*, 5(1), pp.52-63.
- Wagner, J.A. and Gooding, R.Z., 1987. Shared influence and organizational behavior: A meta-analysis of situational variables expected to moderate participation-outcome relationships. *Academy of management Journal*, 30(3), pp.524-541.

- Wexley, K. N., & Latham, G. P. (1991). *Developing and training human resources in organization* (2nd ed.). New York, NY: HarperCollins.
- Wexley, K. N., & Latham, G. P. (2002). *Developing and training human resources in organizations* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.
- White, B. S., & Branch, R. M. (2001). Systematic pilot testing as a step in the instructional design process of corporate training and development. *Performance Improvement Quarterly*, 14(3), pp.75-94.
- Wright, P.M., Gardner, T.M., Moynihan, L.M., Park, H.J., Gerhart, B. and Delery, J.E., 2001. Measurement error in research on human resources and firm performance: Additional data and suggestions for future research. *Personnel Psychology*, 54(4), pp.875-901.
- Xiao, J., 1996. The relationship between organizational factors and the transfer of training in the electronics industry in Shenzhen, China. *Human Resource Development Quarterly*, 7(1), pp.55-73.
- Yadapadithaya, P.S. and Stewart, J. (2003). Corporate training and development policies and practices: a cross-national study of India and Britain. *International Journal of Training and Development*, 7(2), pp.108–123
- Yamnill, S. and McLean, G.N., 2001. Theories supporting transfer of training. *Human resource development quarterly*, 12(2), pp.195-208.
- Yardley, S. (2003), 'Perceptions/comparisons: voluntary and mandatory pre-employment government training', *Journal of European Industrial Training*, 27, 7, 341–54.

Figure 1
Hypothesised model

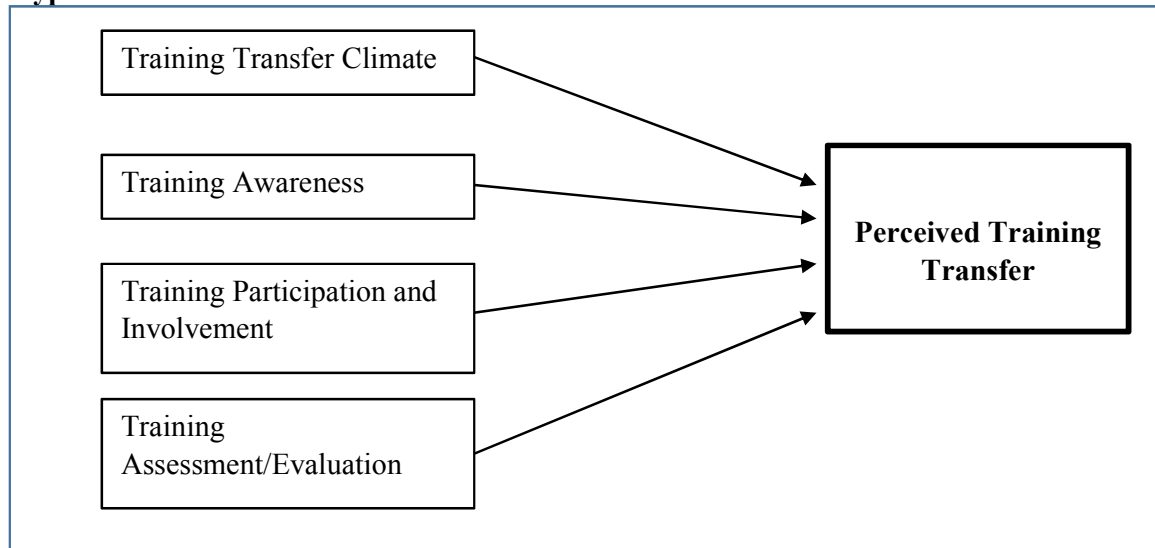


Table 1

Reliability Scores

Constructs	Reliability
Training awareness	0.791
Training transfer climate	0.796
Training participation and involvement	0.806
Training assessment mechanism	0.779
Training transfer	0.783

Table2

Variables	M	Sd.	1	2	3	4	5
Training Awareness	3.33	0.94	--				
Training transfers climate	3.43	0.81	0.44***	--			
Training participation and involvement	3.87	0.84	0.41**	0.49***	--		
Training assessment mechanism	2.81	0.87	0.22	0.28*	0.32*	--	
Training transfer	3.21	0.93	0.38**	0.65***	0.55***	0.48***	--

Means, standard deviations and correlations between study variables

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.

Table3: Results of Stepwise Multiple Regression Predicting Training transfer:

S.No.	Independent Variables	Coefficient	t - statistic
1.	Constant	2.063***	22.339
1.	Training Transfer Climate	0.238***	5.896
2.	Training Participation and	0.212***	6.813
3.	Training assessment mechanism	0.124***	3.461
4.	Training Awareness	0.103***	3.423
	Number of observations	123	
	Adjusted R ²	0.671	
	F-statistics	F(4,118) = 77.088 (p<.01)	

*** at least 1% level of significance