

The relationship between Environmental Characteristics and Training Transfer

Narges Kia

Master of Human Resource Development
Faculty of Educational Studies
University of Putra Malaysia

IsmiArif Bin Ismail

Associate professor
Department of professional Development and Continuing Education
Faculty of Educational Studies
University of Putra Malaysia

Abstract

This study carried out to investigate the relationship between Environmental Characteristics and training transfer among non- academic staff of university. This empirical research conducted through distributing the original questionnaire via simple random sampling style. Descriptive and inferential statistics were used to analyze the collected data. The result of study show there is a significant positive relationship between all dimensions of Environmental Characteristics and Training Transfer.

Keywords: Environmental Characteristic, Training, Transfer

1. Introduction

Training is one of the reliable human resource techniques to increase the organizational productivity (Bhatti and Kaur, 2009). Therefore the organizations normally invest a huge amount of expenses in training programs every year; despite of this, many trained companies failed to transfer it to the work place. This theoretical gap encouraged the researcher to attempt for current study. In order to accomplish organizational tasks and improve the employee efficacy training programs should be designed in such a way that they create a win- win situation for both employee and organization. Employees and also organizations can achieve goals if learning skills are transferred effectively to the workplace (Bhatti & Kaur, 2010). One of the basic targets of training is to provide, obtain, and improve the necessary skills in order to help organizations.

2. Background and Review

2.1 Work Environment Characteristics

Colquitt, LePine, and Noe, (2000) found that a supportive transfer climate has a positive impact on transfer of training. In contrast, an unsupportive transfer climate can have a negative influence on applying the new knowledge, Skill, and Attitude (KSA) at work place (Aguinis and Kraiger, 2009). The support of colleagues and the supervisor is important for the transfer of training. Both *supervisor support* and *peer support* have a positive impact on the encouragement, coaching of trainees, and the transfer of training (Colquitt et al., 2000).

Another work environment element is *accountability*. Accountability is defined as 'the degree to which the organization, culture, and/or management expects learners to use trained knowledge and skills knowledge on the job and holds them responsible for doing so' (Kontoghiorghes, 2002). The role of the trainer, trainee, supervisor, and top management is important throughout the training process. All stakeholders have to understand to what extent they are accountable for transfer and what negative or positive consequences are in their responsibility (Burke and Saks, 2009). But still it seems more research is needed to discover the importance of transferring training through the accountability of trainers, trainees, teams, and organization (Burke and Hutchins, 2007). The study which conducted in state public work agency in East Malaysia, show that the exploratory factor analysis conform the measurement scales. This measurement met the acceptable standard of validity and reliability analysis. In addition the outcomes of stepwise regression analysis indicate to two major findings.

These findings reveal Support and communication as independent variable significantly correlate to the Training Transfer of employee in the workplace (Ismail, Hasan, and Sulaiman, 2010).

2.2 Aspects of the Environment Related to Transfer of Training

The model proposed by Baldwin and Ford (1988) included characteristics of the work environment as a direct influence on the two conditions of transfer: generalization and maintenance of skills and knowledge learned during training. The examples of aspects of the work environment that may impact on transfer included: support from one's supervisor and peers, situational constraints, and opportunity to use one's knowledge and skills on the job. These elements have been incorporated into the more generic construct known as "transfer climate" (Rouiller and Goldstein, 1993).

The earlier work by Peters and O'Connor, offers that elements that can restrict the utilization of acquired skills in the workplace could be construed as situational constraints (Green, and Skinner, 2005). These situational constraints may affect performance directly or indirectly by impacting on the self-efficacy, trainee's motivation, or transfer intentions. Mathieu, Martineau, and Tannenbaum, (1993) found a negative relationship between training-related motivation, and situational constraints, while in another study he found that situational constraints had a negative impact on the development of self-efficacy during training. Where trainees reported greater constraints in their work setting, they also reported more negative reactions to their training. Foxon (1993, 1994) has found that forces in the environment, notably the perception of management support, are crucial determinants of training transfer. Foxon offers that the crucial elements that trainees need to experience are encouragement and positive reinforcement from managers for learning and using their new skills.

3. Methodology

3.1 Research Framework

This research identified by two major variables. The environmental Characteristics as Independent Variable (IV), measured by seven various factors; Training Transfer as Dependent variable (DV) measured by specific items (Figure 3.1). The questionnaire consists of two major variables. Each variable measured by one or more than one dimensions. Each dimension consists of some items. Each item was measured on a five point Likert scale; which 1= Strongly Disagree, 2= Disagree, 3=Slightly Agree, 4= Agree, 5= Strongly Agree

3.2 Instrumental design, validity and reliability

The instrument of study has been chosen based previous relevant studies. The study which conducted by Shad, (2008), confirm the validity and reliability of training transfer and environmental characteristics. The results illustrated in table (3.1). Since the value of Cronbach alpha in all factors is above 0.07, it affirms the reliability of factors.

3.3 Training Transfer

In order to measure the DV, researcher used Opportunity of Perform which consists of 18 items. These items measure the perception of respondent about the opportunities that provided by organization with regard to transfer training.

3.4 Environmental Characteristics

The IV of study is Environmental Characteristics. This variable defined by seven dimensions: Management Support, Peer Support, Workload, Workplace, Technical Support, Budget Availability, Physical and Aesthetic Environment. Each dimension relate to some items (Figure 3. 2)

3.5 Population

Population is defined as a group of people, things or event of interest that are investigated in a study by (Sekaran, 2006). In current study the target population was 100 nonacademic staff in faculty of agriculture in university of Putra Malaysia.

3.6 Sample size and sample procedures

It is not possible for most of studies to cover the whole population, so the researchers draw a sample from the target population. Sample defined as a set of respondents selected from a larger population for the aim of a survey (Ary, Jacobs, Razavieh, and Sorensen, 2010). Additionally, sample must be representative of the whole population. The purpose of sample size is saving time and money (Chen, Liu, Su, Huang, and Lin, 2007).

In this study, the number of sample size was 80 nonacademic staff in faculty of agriculture. The sample accounted based on Cochran Formula. The cases have been selected based on simple random sampling criteria.

3.7 Research Instrument

It is necessary to design an instrument in order to achieve the research objectives. Selecting an appropriate instrument depends on the research problem, type of survey design and nature of information that would be collected (Singh, Kogan, and Dyck, 2010). The questionnaires of this study were consisted of two parts. The first part related to demographics variables which are gender, marital Status, age, total experience, number of month in current position, education, and the number of years employed by organization. The second part is Pierson Scale questionnaire that measured by adapting and translating to Malay (local language). The final accepted draft translated to English again for comparing with original one. This process of back translation assured the researcher about the accuracy and equivalence of translated version of instruments.

3.8 Pilot test

Before the main questionnaire is carried out, a pilot study should be done in order to ensure that the instruments are appropriate and the respondents can understand the questions. In this particular study, the pilot study was done among 30 nonacademic staff. The SPSS was used to assess the reliability of the questionnaires (Table 3.1). Since the amount of Cronbach Alpha for all factors is above 0.7; so the instrument is reliable and can be used in current study.

3.9 Data Collection and Analysis

The procedure of data collection of this study was drop and pick. Data collected was processed using the Statistical Package for Social Sciences (SPSS). Descriptive and inferential statistics were used to analyze the data. In this study Statistical Package for Social Sciences (SPSS, Version 20.0) utilized to descriptive and inferential statistics data analyses. The distribution of the mean and the assumption of the data for trainee, training, environment characteristics with training transfer normally distributed.

4. Result and Discussion

Environmental Characteristics consist of seven dimensions: Management Support, Peer Support, Work Place, Budget Availability, Technical Support, Workload, Physical and Aesthetic Environment. The researcher computed all these dimensions and assigned as one variable (= IV), in order determine its relation with DV. The result of regression analysis shows the significant relationship between these two major variables (Table 4.1).

4.1 Management Support and Training Transfer

The first dimension of Environmental Characteristics is Management Support. As it shown in table 4.10, this factor influence the Training Transfer, because the value of “ $t=4.27$, and the $Sig=0.000<0.05$. It means if management supports the training, the transfer will be accrued. Hence Transfer of Training among the employees significantly relate to the Management Support (Table 4.2).

4.2 Peer Support and Training Transfer

Table 4.10, shows that the value of $Sig=0.000<0.05$, and also the value of “ $t=4.837$ ”; therefore there is a significant relationship between peer support and training transfer among staff. In the other word peer support is considered as an effective factor in this particular study (Table 4.3).

4.3 Workplace and Training Transfer

The result reveal that there is a significant relationship between work place and Training Transfer among non-academic staff, because the value of $Sig=0.045<0.05$; and the value of “ $t=2.04$ ” In the other word work place is considered as an effective factor in this particular research (Table 4.4).

4.4 Budget Availability and Training Transfer

The result of table 4.5 confirms that there is a significant relationship between budget availability and training transfer among staff. The value of “ $t=3.255$ ” and the value of $Sig=0.002<0.05$. In the other word budget availability is considered as an effective factor in training programs. The result of other part of study shows that the technological support, workload and physical environment have same effectiveness in current study.

It means there is a significant relationship between Technological Support, Workload, and Physical and Aesthetic Environment with regard to Training Transfer and considered influence the transferring training (Refer to Table 4.6; Table 4.7; and Table 4.8).

4.5 Discussion

The aim of this study was to investigate the relationship between three independent variables including trainee characteristics, training characteristics, environment characteristics with regard to the training transfer as dependent variable. In fact, the objectives of this study were looking for determining the level of contribution of above mentioned variables among Malaysian non-academic employees. In general the results confirm that all IV in this study have a positive relationship with DV. Hence the findings of study can be justified via theories and models which have explained in Chapter two.

Based on Cognitive Theory and Stimulus generalization Theory the key behaviors are believed to be applicable to a wide variety of situations. In fact the practice sessions in behavior modeling training require the trainee to use the behaviors in a variety of situations that are not identical (Noe, 2010). The stimulus generalization approach emphasizes far transfer. The stimulus generalization approach can also be seen in the design of managerial skill training programs. The behavior modeling training identified via social learning theory and social exchange theory. Therefore, one of the basic steps in developing behavior modeling program is to identify the key behaviors that can be used successfully in a wide variety of situations. It seems in current study some factors directly matched with Cognitive and Stimulus theory and some other factors relatively could be improved through Social Learning theory. For instance, Self Efficacy, Motivation, and Management Support would be identified, and also recognized by such mentioned theories.

The model which developed by Baldwin and Ford (1988), focused on the transfer training. They concluded that there are three important factors that influence the transfer training process. The first one is the Characteristics of the Trainees which refer to their abilities, motivations and personality. Since these factors examined in current study, hence we can claim that Trainee Characteristics with positive relationship, verify and support the body of knowledge.

Furthermore, there is a significant positive relationship between training characteristics and transfer of training. It means training characteristics such as training program and opportunity to perform considered as an effective factor because it can change the attitude and behaviors of the trainees when they come back to work. In this case, the training programs can be planned and managed carefully to ensure that employees will be able to apply what they have learned and increase their work performances. In addition, there was a significant, positive relationship between environment characteristics and training transfer. Because all of dimension in this factor including Management Support, Peer Support, Technological Support, Budget Availability, Workload, Workplace, Physical and Aesthetic Environment, have a significant positive relationship with Training Transfer.

5. Conclusions

This study was examined the relationship between environment characteristics and training transfer among nonacademic staff of University of Putra Malaysia. The researcher chose the valid questionnaires to measure the level of relationships. The data was gathered through face to face meeting and then the filled up questionnaires analyzed by Statistical Package for Social Sciences (SPSS).

The following results came out from the study:

- The relationship between Management Support and transfer is significant.
- The relationship between Peer Support and Training Transfer is also significant.
- There is a positive relationship between Work place and Training Transfer
- There is a significant positive relationship between Budget Availability and Training Transfer.
- There is a positive relationship between Workload and Training Transfer
- There is a positive relationship between Physical and Aesthetic Environment
- There is a significant relationship between Technical Support and Training Transfer.

Based on extracted results, in this study all objectives obtained. In the other word providing suitable materials with regards to technical and physical environment assist the Training Transfer in the workplace.

As mentioned earlier the Training characteristics such as Training Program considered as an effective factor. Moreover the Management Support, Peer Support, Technological Support, Budget Availability, Workload, Physical and Aesthetic Environment, have a significant and positive relationship with Training Transfer. So basically these factors as a huge harmony should be considered for more achievement and more performance.

5.1 Recommendation for Practice

Although at the first step solving the theoretical gap is important but imperially need to be applied. Based on research results, first of all it is recommended that the need of respective organizations should be found and analyzed. Secondly the appropriate program based upon the training objectives should be provided. Thirdly the main resources should be prepared in both theoretical and physical area. Finally the feedback of implemented program should be assess and recognized.

References

- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual review of psychology*, 60, 451-474.
- Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. (2010). *Introduction to research in education*. CengageBrain.com.
- Baldwin, TT & Ford, JK 1988, 'Transfer of training: a review and directions for future research', *Personnel Psychology*, vol.41, pp. 63-105.
- Bhatti, M.A., & Kaur, S. (2010). The role of individual and training design factors on training transfer. *Journal of European Industrial Training*, 34(7), 656-672.
- Bhatti, M.A. and Kaur, S. (2009), "Factors effecting transfer of training: a fresh review", paper presented at the 12th International Business Information Management Conference (IBIMA), Kuala Lumpur.
- Burke, L. A., & Hutchins, H. M. 2007. Training transfer: An integrative literature review. *Human Resource Development Review*, 6: 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), 382-402.
- Chen, C. Y., Liu, C. Y., Su, W. C., Huang, S. L., & Lin, K. M. (2007). Factors associated with the diagnosis of neurodevelopmental disorders: a population-based longitudinal study. *Pediatrics*, 119(2), e435-e443.
- Colquitt, J. A., LePine, J. A., & 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), 678.
- Foxon, M. (1993). Process approach to the transfer of training: part 1: the impact of motivation and supervisor support on transfer maintenance.
- Foxon, M. (1994). A process approach to the transfer of training. Part 2: Using action planning to facilitate the transfer of training.
- Green, P., & Skinner, D. (2005). Does time management training work? An evaluation. *International Journal of Training and Development*, 9(2), 124-139.
- Ismail, A., Hasan, A. B. M., & Sulaiman, A. Z. (2010). Supervisor's role as an antecedent of training transfer and motivation to learn in training programs. *Acta Universitatis Danubius. Œconomica*, 6(2).
- 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), 114-129.
- Mathieu, J. E., Martineau, J. W., & Tannenbaum, S. I. (1993). Individual and situational influences on the development of self-efficacy: implications for training effectiveness. *Personnel Psychology*, 46(1), 125-147.
- Noe, R.A. (2010). Employee training and development: Transfer of training.
- Rouiller, Z. and Goldstein, I. (1993), "The relationship between organizational transfer climate and positive transfer of training", *Human Resource Development Quarterly*, Vol. 4 No. 4, pp. 377-90.
- Sekaran, U. (2006). *Research methods for business: A skill building approach*. Wiley.com.
- Shad, I. (2008). *Influence of Organizational Work Environment on Transfer of Training in Banking Sector* (Doctoral dissertation, NATIONAL UNIVERSITY).
- Singh, G. K., Kogan, M. D., & van Dyck, P. C. (2010). Changes in state-specific childhood obesity and overweight prevalence in the United States from 2003 to 2007. *Archives of pediatrics & adolescent medicine*.

Figure 3.1; Research framework

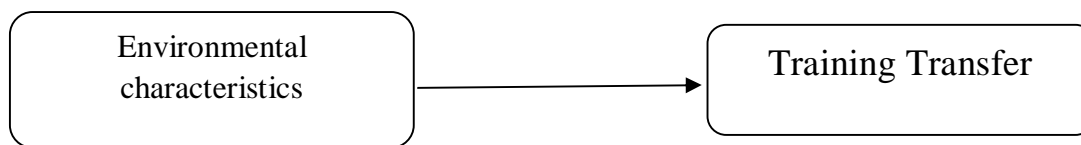


Figure 3.2; Environmental Characteristics Dimensions

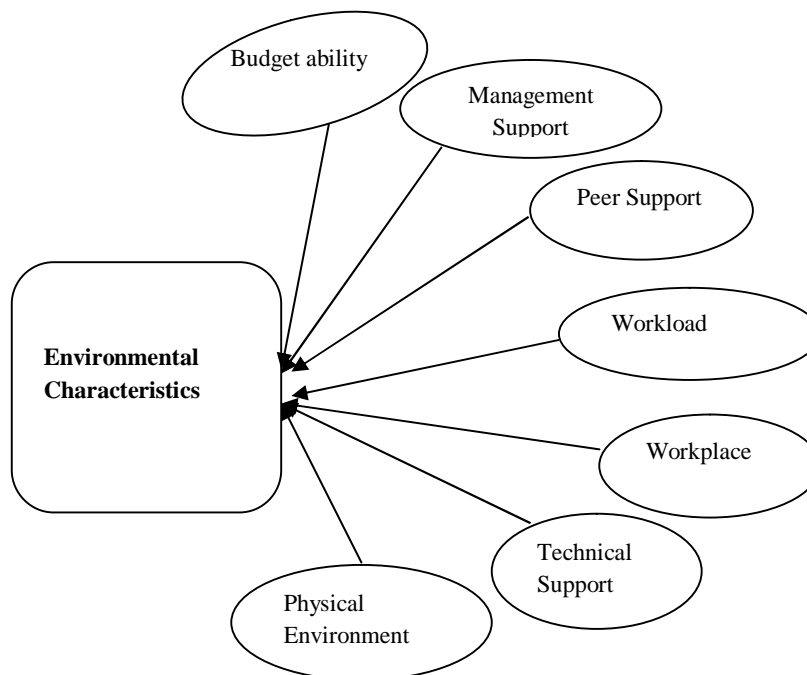


Table 3.1; Validity and reliability confirmation

Variables	Cronbachs Alpha
Management Support	0.95
Peer Support	0.92
Technological Support	0.87
Budget availability	0.86
Opportunity to Perform	0.84
Workload	0.80
Physical And Aesthetic environment	0.88
Workplace Religiosity	0.87

Source: Ikramullah shad (1990)

Table 3.2; Test of Reliability

Name of Factor (dimension)	Cronbach's Alpha
Management Support	0.913
Physical Support	0.938
Technological Support	0.932
Budget	0.782
Opportunity to perform	0.843
Workload	0.867
Physical and Aesthetic Environment	0.936
Workplace	0.979

Table 4.1; Environment Characteristics and Training Transfer

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
1 (Constant)	-3.494	3.835		-.911
Environmental.CH	0.142	.017	0.697	8.364

Dependent Variable: Transfer

Table 4.2; Management Support and Training Transfer

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
1 (Constant)	12.338	3.792		3.253
M. Support	0.246	0.058	0.435	4.272

Dependent Variable: Training Transfer

Table 4.3; Peer Support and Training Transfer

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
1 (Constant)	10.753	3.680		2.922
Peer Support	0.585	0.121	0.480	4.837

Dependent Variable: Training Transfer

Table 4.4; Workplace and Training Transfer

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
1 (Constant)	23.354	2.555		9.142
Workplace	0.162	0.080	0.228	2.039

Dependent Variable: Training Transfer

Table 4.5; Budget Availability and Training Transfer

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
1 (Constant)	19.817	2.688		7.372
B.Availability	.437	.134	.346	3.255

Dependent Variable: Training Transfer

Table 4.6; Technical Support and Training Transfer

Model	Unstandardized	Coefficients	Standardized	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	13.685	2.609		5.245	0.000
T.Support	.841	.147	.545	5.737	0.000

Dependent Variable: Training Transfer

Table 4.7; Workload and Training Transfer

Model	Unstandardized	Coefficients	Standardized	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	10.076	2.402		4.195	0.000
Workload	.697	.090	0.662	7.755	0.000

Dependent Variable: Training Transfer

Table 4.8; Physical and Aesthetic Environment and Training Transfer

Model	Unstandardized	Coefficients	Standardized	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	10.753	3.680		2.922	0.000
P. Environment	.585	.121	.480	4.837	0.000

Dependent Variable: Training Transfer