The Effect of Transfer Climate on Transfer Training

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Abstract Nowadays, the workplace has become a competitive environment full of global and domestic competition, rapid changes in technology and computerization and greater demand for time management. It requires employees regularly to learn new skill and gain new information. Therefore, transfer training is getting important in organization to identify the effectiveness of training. Studies revealed that transfer climate is one of the most important factors that contribute to transfer training. Thus, the purpose of the present research is to identify the effect of transfer climate on transfer training. Four types of transfer climate (supervisor support, peer support, the opportunity to use and rewards) were measured for 183 police officers who attended driver training programs to predict the effectiveness of transfer training on driving competency. Data was analysed using *Statistic Package for Social Science (SPSS) Version 19.0 and SmartPLS 3.0.* The results indicated that opportunity to use and rewards were significantly predicting driving competency. The results suggest that rewards and opportunity to use is potential tool to enhance transfer training.

Keywords: transfer climate, supervisor support, peer support, the opportunity to use and rewards, transfer training

1. Introduction

Faced with economic uncertainty, globalization, and competition, most organizations have invested a large amount of money in training program to improve employees' performance and competitive advantage. For example, the American Society for Training and Development estimated that US organizations spent about $171 billion on employee training and development in 2011. Besides that, the report from the Tenth Malaysia Plan stated that an allocation of RM50 million will be provided to continue the matching grants for training and skills upgrading of employees in small and medium enterprises (SMEs). This represents the concern that the American and Malaysian organizations have in relation to training and developing their employees. However, the management of most organization continues to question whether employees can improve their performance through training after putting a large amount of investment in training. Therefore, it is important to investigate factors that influence the transfer of training in organizations.

According to Noe (2008), transfer of training refers to trainees' effectively and continually applying what they have learned in training to their jobs. Based on meta-analyses conducted in previous studies (Burke & Hutchins, 2007; Grossman & Salas, 2011), transfer climate displays the closest relationship to training transfer compared to other components such as accountability, strategic link, opportunity to perform and social support. Previous studies have investigated several transfer climate variables such as the opportunity to perform, situational cues, supervisor support, peer support, and reward (Gilpin-Jackson & Bushe, 2007; Grossman & Salas, 2011). These studies showed that there is a significant relationship between transfer climate and transfer training. However, multiple measures exist for measuring transfer climate, each with a different focus, and this encourages the researcher to further clarify transfer climate as a factor. For example, Rouiller and Goldstein (1993) constructed a conceptual framework for transfer climate that includes situation cues and consequences. According to Lim & Morris (2006), transfer climate variables consist of responsiveness to change, education support, transfer opportunities and peer and supervisor support. Different measurement of transfer climate leads to the present study in the effort to investigate the effect of transfer climate and transfer training. In the present study, transfer climate is defined as the conditions in organizations that either prevent or encourage the

application of what has been learned in training to the job. Transfer climate in this study is divided into supervisor support, peer support, opportunity to use and rewards.

Various studies defined transfer climate as work environment conditions that influence the generalization and maintenance of knowledge and skills learned during training (Holton, Bates, Seyler, & Carvalho, 1997; Machin & Fogarty, 2004; Rouiller & Goldstein, 1993; Tracey, Tannenbaum, & Kavanagh, 1995). For example, the findings from Maria (2012) have confirmed that supervisor support is significantly related to transfer training. The result showed that perceived supervisor support is statistically correlated with training transfer. Harry (2010) stated that those with greater peer support have showed greater improvement than those with less peer support. A study carried out by Gilpin-Jackson and Bushe (2007) indicated that there was a significant correlation between opportunity and utilization of skills on the job. These studies indicated that transfer rewards such as verbal, praise and promotion chances moderately increase transfer training (Korunka, Dudak, Molnar, & Hoonakker, 2010). These studies also showed that transfer climate has a significant relationship with the degree of learning transferred from the training program to the workplace.

However, some inconsistent finding has been found in the literature of transfer training. According to meta-analysis study of Cheng and Ho (2001), the results from ten studies were found to have positive relationships between organizational support (one of the variables of transfer climate) and transfer training, whereas the remaining a study had negative relationships (Nijman, Nijhof, Wognum, & Veldkamp, 2006) and five studies had an insignificant link (Awoniyi, Griego, & Morgan, 2002; Gilpin-Jackson & Bushe, 2007; Ooi Ang Ling, Phuah Hui Woon, & Ven, 2011; Tziner & Haccoun, 1991; Van Der Klink, Gielen, & Nauta, 2001) . Besides that, the study by Gilpin-Jackson and Bushe (2007) indicated that supervisor support such as encouragement and verbal praise did not influence transfer of training. The inconsistency of these findings should serve as an encouragement for researchers to further study the effects of transfer climate and training transfer. Thus, the purpose of the present study is to investigate the effect of transfer climate on transfer training.

2. Methodology

2.1 Respondents and settings

The respondent of this study consisted of police officers who attended police driving training for Vehicle class B and Vehicle class E2. **Each police driving training was designed to develop a foundation for drivers to make sound decisions and to ensure safe and effective vehicle operation under all conditions.** Each training consisted of two parts, which are theory session and practical practice. The duration of each training was three to four weeks. This present study used purposive sampling because the population of the study only consisted of 242 police officers, which is considered as a small-sized population and only those who attended the driving training were selected.

2.2 Procedures

Data collection was done through a guided self-administered questionnaire. Each participant was given an ID for tracing and maintaining anonymity purposes. Instructions and information about the study were given to the respondents. They were clearly informed that the results of this study would not have any influence on their training performance. Two set of questionnaires were distributed. The first set of questionnaire, which contains demographic information and Big Five Inventory, was distributed and collected from the trainees before the training start.   Two months after the training, participants were asked to answer the second set of questionnaire, which includes transfer climate and driving competency.

2.3 Instrument

The questionnaire consists of demographic profile such as gender, age, race, education level, status marriage, service duration, salary per month, Big Five Personality Inventory, training achievement test, transfer climate and driving competency. Trainees' personality was assessed by using the Big Five Inventory. In the Big Five Inventory, each broad five-factor constructs represented six facets. The facets of Big Five Inventory are similar to Neo-PI-R. Each construct was measured with 8 to 10 items. The items have a 5-point response scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The Big Five Inventory (BFI) is a 44-items measure

(John & Srivastava, 1999). BFI was used to measure the Big Five personality in the present as other instruments for personality have too many items and facets. The researcher used BFI as the measurement tool to avoid the problems in data collection associated with the length of the survey. Excessive survey questionnaire length is viewed as an inhibitor to response (Porter, 2004).

Transfer climate was examined by using Learning Transfer System Inventory (LTSI) that was created by Holton and Bates (2000). The purpose of the present study is to assess the effect of four transfer climate variables on transfer training. These include supervisor support, peer support, opportunity to use and rewards. Each dimension contained three to six items and each item had a 5-point response scale ranging from 1 (strongly disagree) to 5 (strongly agree). For the purpose of this study, the researcher only selected 17 items out of 89 items that are relevant to the study, such as supervisor support, peer support, opportunity to use and rewards. The item of rewards (one of the dimensions of transfer climate) is adapted from Xiao (1996).

2.4 Data Analysis

Partial least square-structural equation modelling (PLS-SEM) was adopted for data analysis. The validation of structural model was performed by using SmartPLS 3.0. The research model was analysed and interpreted in two stages. First, item reliability, convergent validity and discriminant validity were assessed for the outer model. Second, path coefficient, path validity and predictive ability of the dependent constructs in the model were explored for the inner model.

3.   Results

Prior to training, 242 questionnaires were initially distributed to the participants who attended driving training. A total number of 242 questionnaires were returned. However, a large amount of data was missing in one questionnaire, where some of the items in the criterion measures were not answered by the participant. Therefore, 241 questionnaires were considered legitimate for this research. After two months, only 183 questionnaires were returned and 59 questionnaires were not. This is because either the researcher was unable to contact the participants, or the participants changed their workplace or they were busy. With 183 returned and usable surveys out of 242, the response rate was 75.61%.

From the subjects who responded to the study, 92.3% were male, 87.9% were Malay, 0.5% Chinese, 4.4% Indian, 7.1% from other races such as Kadazan and Iban, 67.6% were married and they possessed an average tenure of 8.64 years with the organization. The mean age of the respondent was 30.1 years old.

3.1 The Measurement Model

The proposed model is graphically presented in Figure 1 and consists of five latent variables; four dimension of transfer climate (supervisor support, peer support, opportunity to use and rewards) and a endogenous variables (driving competency).
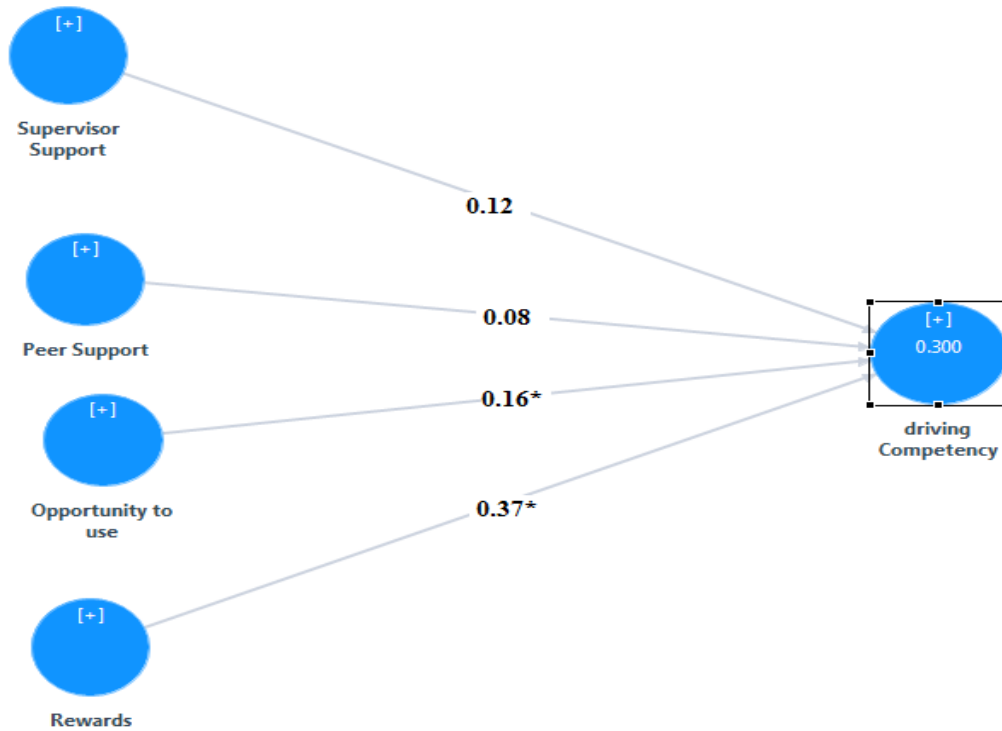
Figure 1: Structural model

The researcher evaluated the proposed model for internal consistency reliability, convergent validity and discriminant validity in order to establish the adequacy of latent variables with respect to capture their corresponding manifest variables. After that, the path coefficients of the present study are presented.

Table 2: Assessment of the measurement model

	Composite Reliability	AVE
Opportunity to Use	0.822	0.536
Peer Support	0.794	0.565
Rewards	0.799	0.572
Supervisor Support	0.813	0.525
Driving Competency	0.800	0.501

Reliability results are given in Table 2. The data indicates that the measures are robust in terms of their internal consistency reliability as indexed by the composite reliability. The composite reliabilities of the different measures ranged from 0.79 to 1.00, which exceeded the recommended threshold value of 0.70. In addition, consistent with the guidelines of Fornell and Larcker (1981), the average variance extracted (AVE) for each measure exceeded 0.50. Table 3 reports the results of testing the discriminant validity of the measure scales. The elements in the matrix diagonals, representing the square roots of the AVEs, are greater in all cases than the off-diagonal elements in their corresponding row and column, thus supporting the discriminant validity of our scales.

Table 3: Discriminant validity (intercorrelations) of variable constructs

	Opportunity to use	Peer Support	Rewards	Supervisor Support	Driving Competency
Opportunity to use	0.731				
Peer Support	0.439	0.753			
Rewards	0.337	0.262	0.756		
Supervisor Support	0.293	0.372	0.313	0.723	
Driving Competency	0.357	0.294	0.484	0.317	0.708

The researchers tested the indicator reliability using SmartPLS 3.0 by extracting the factor and cross loadings of all indicator items to their respective latent constructs. Based on the analysis, all items in the measurement model exhibited loadings that exceeded 0.50, ranging from 0.55 to 0.830. All items are significant at the level of 0.001. Table 4 shows the loading for each item and its corresponding t-statistic values for the respective constructs. Based on the results, all items that are used for this study have demonstrated satisfactory indicator reliability.

Table 4: Results of indicator reliability

	Opportunity to Use	Peer Support	Supervisor Support	Rewards	Driving Competency
T11	0.735 (11.867)				
T12	0.700 (9.831)				
T13	0.756 (12.781)				
T14	0.779 (13.500)				
T7		0.842 (14.223)			
T8		0.754 (8.957)			
T9		0.646 (6.045)			
T1			0.812 (15.373)		
T2			0.793 (15281)		
T3			0.674 (8.570)		

T5	0.598 (5.808)	
T16	0.679 (9.056)	
T17	0.736 (12.349)	
T18	0.846 (26.838)	
D1		0.731 (15.131)
D3		0.700 (14.843)
D4		0.625 (10.717)
D5		0.769 (15.494)

3.2 The Structural Model

Within the structural model, each path connecting two latent variables represents a relationship between independent and dependent variables. By using SmartPLS algorithm output, the relationship between independent and dependent variables was examined. According to Hair, Hult, Ringle, and Sarstedt (2013), the significance level and t-statistical of the path are determined by using SmartPLS bootstrapping function. Table 5 lists down the path coefficients, observed t-statistics, and significance level for all paths in the baseline model.

Table 5: Path coefficient of structural model

	Path Coefficient	t-Statistics ($|O/STERR|$)	Significance Level	p- Values
Opportunity to Use -> driving Competency	0.163	2.015	*	0.044
Peer Support -> Driving Competency	0.082	0.971	N.S	0.332
Rewards -> Driving Competency	0.370	5.266	*	0.000
Supervisor Support -> Driving Competency	0.123	1.505	N.S	0.133

N.S = Non-significant
*$p<0.05$

The finding from Table 5 shows that rewards and opportunity to use significantly affected driving competency. However, supervisor support and peer support did not significantly affected driving competency.

4.   Discussion

The purpose of this paper is to investigate the effect of four dimensions of transfer climate (supervisor support, peer support, opportunity to use and rewards) on two types of transfer training (training achievement and driving competency). The finding indicated that two dimensions of transfer climate (opportunity to use and rewards) out of four affected driving competency significantly.

Opportunity to use was found to have a direct effect on driving competency. The finding is consistent with previous studies (Cromwell & Kolb, 2004; Gilpin-Jackson & Bushe, 2007). It indicates that the opportunity to use can enhance trainees to practice their training in their job by providing adequate time and resources to the employee. The finding shows the importance of opportunities to use trained skill and knowledge on the job. Trainees should be provided the opportunity to allow them to transfer their training on their job so that the performance of the company will be increased.

In addition, rewards were determined as the most important dimension for transfer climate out of the four dimensions. The result of the present study is consistent with previous research by Korunka et al. (2010). It indicated that trainee's behaviour of transfer training was improved by giving positive reinforcement to trainees. According to Expectancy Theory, when trainees feel that their efforts are appreciated, they will be motivated to learn and apply new knowledge and skill on their job and continue with their learned behaviour. Therefore, it is important to provide rewards in terms of verbal praise, promotion chance and salary increase to enhance the motivation of the employees. Consequently, high motivation to apply the learned skill or knowledge will improve not only the performance of the employee himself/herself, but will also improve the performance of the organization. It is suggested that the management of organization should enforce the reward system to encourage employees to apply new skill and knowledge.

Neither supervisor support nor peer support was affected driving competency significantly. The finding indicates inconsistency with previous study which claims that supervisor support and peer support significantly predicted transfer training. In the present study, supervisor support and peer support are more focused on encouragement and mental support of the employees. It shows that the employer or colleague in the present study may be did not influence the employees to apply their new learned skills and knowledge by providing encouragement and mental support. It can be concluded that the respondents in the present study prefer receiving instrumental support such as reward, plenty of resources and plenty of time, which is concrete and directly help them.

5.   Conclusion

The purpose of the study is to investigate the effect of transfer climate on transfer training. This study would contribute to practitioners and policy makers. The finding showed that opportunity to use and rewards significantly affected transfer training. Although supervisor support and peer support were not significantly affected by transfer training, the study extends our understanding on the importance role of transfer climate on transfer training. The present study proposed that the top management of an organization should focus more on opportunity to use and rewards when planning and developing training. Besides that, future study can further clarify different constructs of transfer climate that trainees need at different stages.

There are some limitations in the present study. The first limitation is the sampling method. Purposive sampling was used due to the limited sample in the training program. It might lead to lower generalizability of research findings. Therefore, it is suggested that the random sampling method can be used to increase the generalizability of research finding. Besides that, this study can only be generalized to police officers who attend the driving training provided by Maktab Teknik Polis Diraja Malaysia. The present study is also limited to the population that was studied in the specific training program. It suggests that further study can use different field of data to identify the variables. Finally, due to the limited variables of transfer climate in the present study, it is recommended that future work can expand the transfer climate to other work environment variables such as feedback, reinforcement and accountability.

6.   Acknowledgements

7.   References

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