

# DOES SUPERVISOR SUPPORT CREATE EFFECTIVE TRANSFER OF TRANSFER OF TRAINING AND FIRM' PERFORMANCE? CASE OF MYANMAR PRIVATE MANUFACTURING FIRMS

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## ABSTRACT

*To upgrade transfer of training and individual and organization performance or firm's performance after the training is a significant requirement for all organizations. There are several factors that can create the effective transfer of training and firm's performance. The issue of this study is to explore the direct and indirect effect of supervisor support on transfer of training and firm's performance. Data was collected from 340 employees of private manufacturing firms in Yangon region, Myanmar. Structural equation modeling (SEM) with LISREL 8.72 was used to test the causal relationship among supervisor support, transfer of training, and firm's performance. The result indicated that supervisor support significantly and positively related to transfer of training. Additionally, transfer of training fully mediated the relationship between supervisor support and firm's performance.*

**Keywords:** 1) supervisor support 2) transfer of training 3) firm's performance 4) private manufacturing 5) firms

## 1. Introduction

Specific situation, and to perform various tasks, a significant improvement on firm performance can be achieved in the organizational context (Batool and Batool, 2012). Training has become increasingly vital to the success of modern organizations and plays a critical role to create and support competencies that give the organizations an advantage over their competitors (Snell and Bohlander, 2007, p.282). The outcome of a successful training program is not only to achieve the new knowledge, skills and abilities but also to improve the individual and firm performance in which organizations expect

By upgrading employee's knowledge, skills, attitudes and abilities to cope with that the employees' behavior changes after training will be positive and will lead to achieve high performance (Awoniyi et al., 2002).

In reality, investments in training programs often fail to satisfy the desired and expected outcomes of organizations (Kontoghiorghes, 2004). Training alone is not sufficient to result in positive and effective job performance after training (Dirani, 2012). The effectiveness of training depends ultimately on whether the employees actually apply or transfer the learned skills to the real work environment (Salas and Cannon-Bowers, 2001; Chiaburu and Lindsay,

2008; Chiaburu et al., 2010). Thus, the actual application of training outcomes or transfer of training is one main problem faced by the organizations after the training programs (Saks and Burke, 2012). Based on the literature, the importance of supervisor support in transfer of training was explored in previous studies (e.g., Clarke, 2002; Saks and Belcourt, 2006; Blume et al., 2010; Zumrah et al., 2012).

In Myanmar, private manufacturing firms have performed many kinds of training programs. The training programs of those firms are designed and delivered to gain the significant performance of the employees, and to upgrade firm's performance. However, these firms could not effectively emphasize the importance of supervisor support to apply the learned skills in the workplace after the training. Because of these requirements, firms often fail to acquire their expectations about the training, the return on training investment, and the actual application of training outcomes or transfer of training by employees to achieve higher firm's performance. Additionally, there is no study that has explored the effect of supervisor support on transfer of training and firm's performance in the manufacturing context of Myanmar.

To fulfill the research gap of the country, the following research questions guided this study.

- (i) How does supervisor support relate to transfer of training?
- (ii) How does transfer of training relates to firm's performance?
- (iii) Does transfer of training mediate the relationship between supervisor support and firm's performance?

The purpose of this study was to investigate the effect of supervisor support on transfer of training and firm's performance or the significant direct relationships among supervisor support, transfer of training and firm's performance and the importance of supervisor support which has an essential contribution to achieve a successful application of training outcomes in the job and to create a successful picture of firm's

performance of private manufacturing firms in Myanmar.

## 2. Literature Review

### 2.1 Supervisor support

According to Holton et al. (2000), supervisor support is the extent to which supervisors-managers support and reinforce the use of newly learned knowledge and skills on the job (p. 345). Supervisors provide supports such as working with trainees to set goals to apply learning, giving assistance, and providing a model of the trained behaviors to use the learned skills on the job (Russ-Eft, 2002). Supervisor should redesign the job-performance expectation, create effective plans to practice the learned skills in the real jobs and assign new tasks that involve the training content for employees to improve their performance (Garavaglia, 1993). If the employees are provided with greater supervisor support, the higher job utility of training and higher motivation is obtained as expected by the organizations (Clark et al., 1993). They also stated that if supervisors believe that training can improve the actual performance of trainees, they will try to promote the transfer behavior of employees after the costly training programs.

According to Warr et al. (1999), if supervisors and colleagues encourage and reward the application of trained skills by employees, increased individual performance will be obtained at work. Elangovan and Karakowsky (1999) argued that supervisor will highly motivate to use the newly trained skills by trainees after the training program. An empirical study of Clarke (2002) stated that supervisors need to support employees for their application of newly learned skills on the job. In Wickramasinghe's (2006) study, trainees actually satisfy with the help of their superior in the transfer of the learned skills on the job. Similarly, Saks and Belcourt, (2006) and Blume et al. (2010) stated that supervisor's support is one of the strongest predictors of training transfer and it can create effective transfer

of training in the organizations by providing employees with support, opportunities to apply the learned skills, and reward for using newly acquired skills on the job. If the employees receive the support from their supervisor to apply the new learned knowledge, skills, and attitudes on the job, they can create positive transfer of training (Zumrah et al., 2012). According to Pham et al. (2013), supervisor support, one of the work environment factors, has a significant relation with training transfer.

On the other hand, the unexpected results of the insignificant relationship between supervisor support and transfer of training were obtained in some studies (e.g., Velada et al., 2007; Chiaburu and Marinova, 2005; Devos et al., 2007). They suggested that the employees depend less on their supervisors to apply their learned skills in the workplace. Because of the different results of previous studies, the following hypotheses were established to test the effect of supervisor support on transfer of training and firm's performance.

**Hypothesis 1:** Supervisor support has direct effect on transfer of training.

**Hypothesis 2:** Supervisor support has direct effect on firm's performance.

## 2.2 Transfer of training

Georgenson (1982) defined transfer as "the degree to which an individual uses the knowledge and skills learned in the classroom on the job in an effective and continuous manner (p. 75). Because of the poor transfer of training, the newly trained competencies are not transferred to the work environment by trainees to result in positive changes in job performance (Manju and Suresh, 2013) and then the organizations' investment in training is often wasted (Burke and Baldwin, 1999). The success of training has to be evaluated in terms of training transfer (Wickramasinghe, 2006) and the meaningful measures of performance improvement would indicate transfer (Ford et al., 2011).

Specifically, to maximize learning and to create higher performance, transfer

of training is one of the important factors in which support in the work environment, opportunity to perform, and transfer of training climate are included (Werner and Desimone, 2006). Without transfer, organizations may not expect to gain benefits from training investment (Grossman and Salas, 2011). In addition, the organizations must emphasize the training programs to improve training activities in the post-training work environment and to transfer the training outcomes for the achievement of organizational performance (Saks and Belcourt, 2006). Additionally, the way to support the learners to enhance performance is an unavoidable challenge for the organizations (Hutchins, 2009). Among the training transfer models, Baldwin and Ford's (1988) provides a critical analysis of the existing transfer literature and suggests directions for future research. Rouiller and Goldstein (1993) explored that employee who learns more in training will create better job performance by applying their learned skills through training transfer behavior. Xiao's (1996) result revealed that supervision and matching trainees' KSAs with work design are the most influential factors of the transfer of training.

The organizations should try to focus on the essential support factors that will provide the trainees to attempt to transfer learning to the job (Cromwell and Kolb, 2004). By exploring several factors to create successful training transfer, organizations can gain both the higher rate of return on training investments and the management capability necessary to create competitive advantage through the successful transfer of training (Kirwan and Birchall, 2006). Thus, in transfer of training literature, several supporting factors were explored to create transfer of training and individual and organizational performance in the long term.

If the employees immediately apply their new skills in the work environment, the success of training transfer will be clearly demonstrated (Vo and Hannif, 2012). In Kontoghiorghes' (2004) study, the

expected outcome of training transfer is to improve individual and organizational performance. The result showed that organizational environment factors have significant impact on individual or organizational performance and have a moderating effect on the successful training transfer. Moreover, a meta-analytic of Colquitt et al. (2000) stated that the ultimate outcome of transfer process is to achieve job performance. The study of Burke and Hutchins (2008) reported that supervisor support, coaching and opportunities to practice new skills and knowledge are the best practices in training transfer and then job performance can be achieved through these transfer factors. Thus, the transfer of training that acts as a link between training and performance improvement will remain as a critical requirement for the successful training initiatives (Hutchins, 2009). To contribute to the literature of transfer of training, this study explored the firm's performance as the expected outcome using the following hypotheses.

**Hypothesis 3:** Transfer of training has direct effect on firm's performance.

**Hypothesis 4:** Transfer of training mediates the relationship between supervisor support and firm's performance.

### 2.3 Firm's performance

In the present study, the expected outcome is to promote firm's performance. The importance of supervisor support and transfer of training was explored to access whether those factors actually played a significant role to create firm's performance. Holton et al. (2000) concluded that changes in individual performance by applying the learned skills after training, and organizational performance are based on transfer of training or actual application of training outcomes. To improve the performance, the skills and behaviors learned in training have to be transferred to the workplace, maintained over time, and generalized across contexts (Holton & Baldwin, 2003). The expected return of training programs is to improve individual and organizational

performance and transfer of training is the essential factor to improve the organizational performance (Kontoghiorghes, 2004).

Although training transfer has a significant impact to improve organizational performance, the short coming is that this domain (organization performance) receives the least emphasis in the training transfer literature (Holton, 2005). Moreover, individual and organization performance as the ultimate outcome of training transfer variable is often absent in transfer models (Burke and Hutchins, 2008). The ultimate goal of any training program is to promote individual and organization performance and the weakness in transfer of training after training may hinder the organizational growth and employees' performance improvement (Bhatti and Hoe, 2012). Thus, it is necessary to evaluate the positive relation between organizational performance and individual performance in the transfer of training (Millar and Stevens, 2012). Kuchinke (1995) argued that training outcomes should emphasize on performance improvement, not just learning.

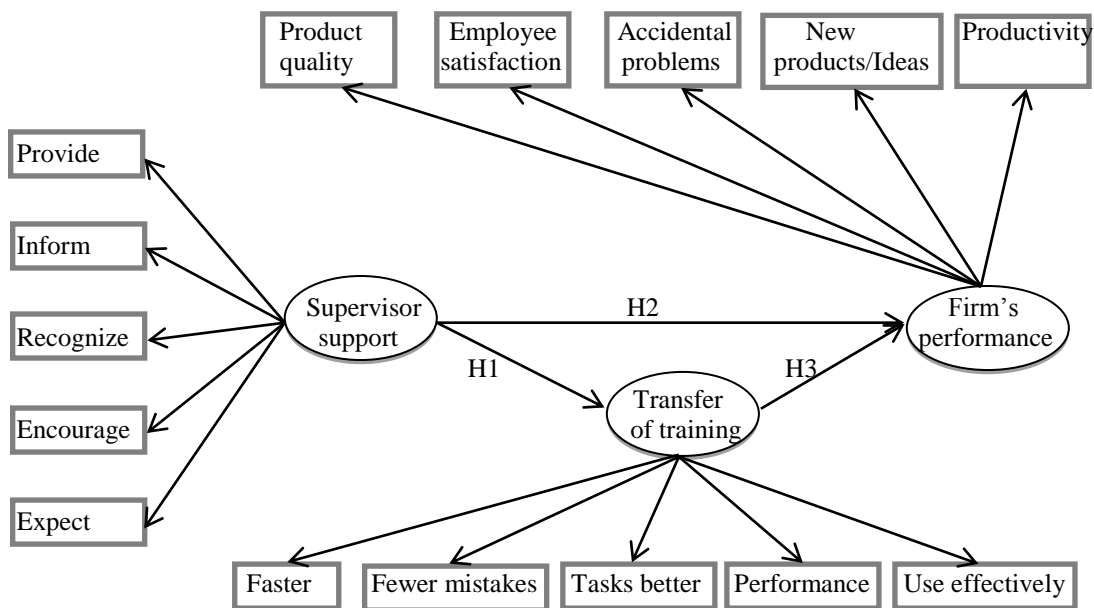
To improve organizational performance through training, some studies explored the weakness of transfer process on performance. One is that management should involve in developing training goals and objectives so that trainees will be motivated to follow up on training outcomes. Moreover, to create successful organizational performance, they should work together with employees to create supportive work environment, and to share the knowledge needed to transfer the skills to the actual workplace (Hawley and Barnard, 2005). Tracey and Tews (2005) argued that the success of transfer and subsequent preparation for future development activities depend on the alignment between training, performance management procedures, and incentive programs.

On the other hand, if the organization's performance evaluation procedures do not record about the use of the newly acquired knowledge by trainees, the trainees will not utilize new knowledge gained from the

training program (Tracey and Tews, 2005). They concluded that organizations should provide the attractive incentive systems as one motivational strategy to create effective performance. If the organizations focus on the needs and satisfaction of employees and their demand, the employees will support the significant performance for organization not only in the present but also in the near future (Golparvar et al., 2012).

According to the previous studies, firm's performance is measured with financial and nonfinancial factors (e.g., Delaney and Huselid, 1996; Kaynak, 2003; Tzafrir, 2005; Lau, 2011; Dermol and Cater, 2013). Delaney and Huselid (1996) used perceptual measure of organizational performance with four-point Likert scale items such as quality of products, services,

or programs, new product development, ability to attract and retain essential employees, customers or clients satisfaction, relations between management and employees, and relations among employees in general. Some used specific measures to evaluate firm's performance. Tzafrir (2005) measured firm's performance using both perceived organizational performance and objective performance measurements such as current ratio, return on assets, return on equity, and net profit to evaluate firm's financial and nonfinancial performance. In this study, firm's performance was evaluated by using the perceptual measures of employees based on the factors such as product quality, employee satisfaction, reduction in accidental problems, new product/ideas development, and productivity.



**Figure 1:** Hypothesized model

### 3. Method

#### 3.1 Sample and procedure

This study used the questionnaires to collect the primary data. In questionnaire, except for the general information about the employees, all the variables were measured on fifteen five-point Likert-type scale items (1-strongly disagree to 5-strongly agree). The respondents for this study were the employees of private manufacturing

firms in Yangon region of Myanmar. Those employees attended the training program at least once in year 2013. Using simple random sampling, a total of 340 valid questionnaires were included in the analysis. According to the personal data, 66.8 per cent of the respondents were male. 30.6 per cent and 37.2 per cent were aged between 18 and 23 years and between 24 and 29 years respectively. In terms of educational level, 43 per cent held a high

school degree and more than one-third of the respondents (33.9 per cent) held a university degree. 46.1 per cent of respondents had the work experience between 0-2 years and 37.5 per cent were the work experience of 3-5 years. Over 76 per cent of respondents attended the training programs at least 1-2 times in year 2013.

### 3.2 Measures

Supervisor support was measured with five items developed by Xiao (1996), and Tracey and Tews (2005). A sample item was 'My supervisor provides assistance when I apply new KSAs on my job'. The measured items for transfer of training were adopted from Xiao (1996), and Facticeau et al. (1995). A sample item was 'I have performed job tasks better by using new KSAs'. Firm's performance was measured with five items. All items for firm's performance were developed based on previous literature (e.g. Kontoghiorghes et al., 2005; Delaney and Huselid, 1996; Kaynak, 2003; Lau, 2011; Dermol and Cater, 2013). A sample item was 'Because of the application of new knowledge, skills, and abilities by employees after the training, the firm obtains the higher quality of the products.'

### 3.3 Analytical procedure

This study used structural equation modeling (SEM) with LISREL 8.72 (Jöreskog and Sörbom, 2005) to test the relationships of the constructs. To compute the measurement and structural equations, LISREL (Linear Structural Relationships) is popular commercial statistical software (Cheng and Ho, 2001). The primary advantage of LISREL is that it tests the relationship among all variables under consideration simultaneously (Tracey et al., 2001, p. 14). Based on previous studies,

data analysis was conducted in two stages (e.g., Clark et al., 1993; Naquin and Holton, 2002; Yamkovenko and Holton, 2010; Bhatti et al., 2013). First, measurement model (factor) analysis evaluated the contribution of each item to the construct (latent variable) was assessed. Second, the structural model was tested to determine the strength of the hypothesized relationships between the constructs. The internal consistency among the variables was checked with the Cronbach's alpha.

## 4. Results

Before testing the proposed hypotheses, we examined the accuracy of the measurement model. The proposed model represented a relatively poor fit to the data:  $\chi^2 (87) = 324.34$ ; IFI = .95; CFI = .94; SRMR = .06; RMSEA = .09. According to the recommendations of several researchers, including Bollen, 1989; Hair et al., 2010; Bentler, 1990; Schreiber et al., 2006; Libermann and Hoffmann, 2008; Yankovenko and Holton, 2010, the model fit was assessed by examining several goodness-of-fit (GFI) statistics indices: ratio of  $\chi^2$  which is the most direct and obvious test of model fit, normed Chi-square ( $\chi^2/df$ ), Incremental Fit Index (IFI), Comparative Fit Index (CFI), standardized root mean residual (SRMR), and the root mean squared error of approximation (RMSEA). A well-fitting model will have the  $\chi^2/df$  smaller than 2, IFI, and CFI values that are 0.9 or higher, RMSEA value below 0.05 and SRMR value less than or equal to 0.08 to indicate appropriate goodness-of-fit (Bollen, 1989; Hair et al. 2010; Williams et al. 2009; Chiaburu et al., 2010; Zumrah et al., 2012). Model fit statistics are presented in Table 1.

**Table 1:** Models and fit statistics

Models	$\chi^2$	df	IFI	CFI	SRMR	RMSEA
Proposed model	324.34	87	0.95	0.94	0.068	0.090
Revised model	84.71	69	1.00	1.00	0.043	0.026

All  $\chi^2$  values are significant at  $p < 0.01$ . df = degree of freedom, IFI = incremental fit index, CFI = comparative fit index; NNFI = non-normed fit index; SRMR = standardized root-mean-square residual; RMSEA = root-mean-square error of approximation. Mean, standard deviation, reliability estimates, and correlation matrix of all variables are shown in table 2.

**Table 2:** Means, standard deviations, reliability estimates, and correlation matrix

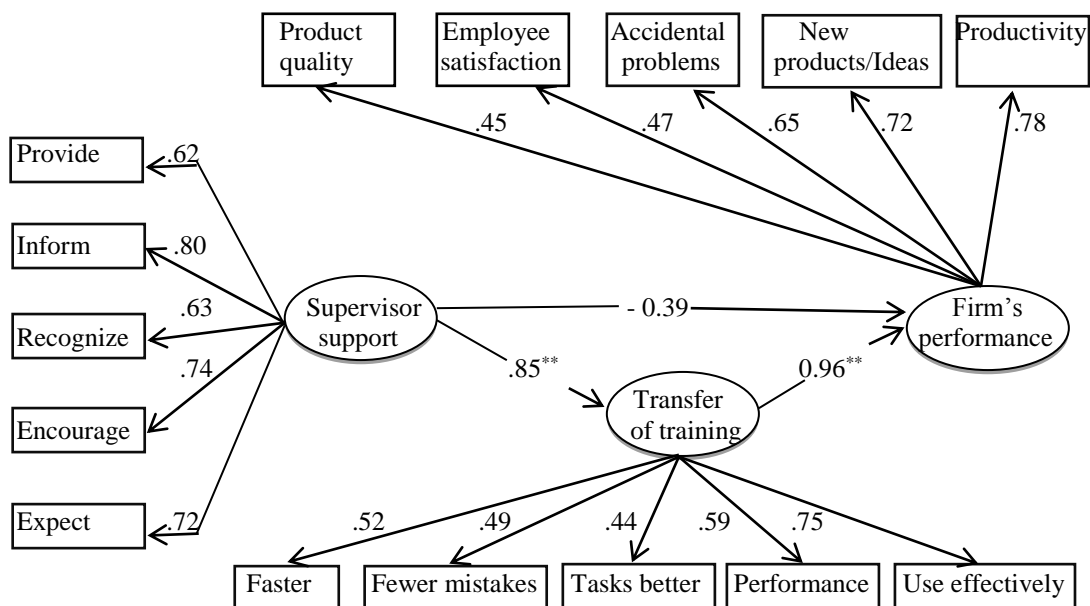
Variables	N	Mean	SD	SS	TOT	FP	Alpha	Item
SS	340	4.18	.531	—			.832	5
TOT	340	4.31	.357	.85**	—		.762	5
FP	340	4.25	.393	.60**	.83**	—	.765	5

\*\* . Correlation is significant at the 0.01 level (2-tailed)

SD = Standard deviation, SS = supervisor support, TOT = transfer of training, FP = firm's performance

This stage of analysis involved the testing of the hypothesized relationships among the latent variables. Based on the results of the direct, indirect and total effects with t value greater than 1.96, the proposed hypotheses were considered to accept or reject. Additionally, Baron and Kenny's (1986) three conditions for mediation were

used to test the mediating effect of transfer of training: (a) the independent variable must affect the mediator in the first condition; (b) the independent variable must affect the dependent variable in the second condition; (c) the mediator must affect the dependent variable in the third condition. The final results are presented in figure 2.



\*\*  $p < .01$

**Figure 2:** Final model with results

Accordingly, supervisor support had a strong direct effect on transfer of training ( $\gamma = 0.85$ ,  $t = 8.76$ ), supporting hypothesis 1. The effect of supervisor support on firm's performance was not significant ( $\gamma = -0.39$ ,  $t = -1.63$ ). The result did not support hypothesis 2. The effect of transfer of training on firm's performance was significant ( $\beta = 0.96$ ,  $t = 3.99$ ). The result supported hypothesis 3. For hypothesis 4, the direct effect of supervisor support on transfer of training was statistically significant. Similarly, the direct effect of transfer of training on firm's performance was significant. However, the direct effect of supervisor support on firm's performance was not significant. Thus, supervisor

support had indirect effect on firm's performance through transfer of training. This indirect relationship from supervisor support to firm's performance through transfer of training revealed that transfer of training mediated the relationship between supervisor support and firm's performance. According to the results, supervisor support created firm's performance through transfer of training. The result supported hypothesis 4 (Transfer of training mediates the relationship between supervisor support and firm's performance). The direct, indirect and total effects of supervisor support and transfer of training on firm's performance are shown in table 3.

**Table 3:** Summary of direct, indirect and total effects

	Transfer of training			Firm's performance		
	Direct	Indirect	Total	Direct	Indirect	Total
Supervisor support	0.85	-	0.85	-0.39	0.99	0.60
Transfer of training	-	-	-	0.96	-	0.96

## 5. Conclusions

The main purpose of this study was to explore the effect of supervisor support on transfer of training and firm's performance. The first finding was that supervisor support directly related to transfer of training or it had the direct effect on transfer of training. It was clear that employees with more supervisor support are more likely to transfer their learned skills to the job. The result of the significant direct effect of supervisor support on transfer of training strongly supported the previous studies (e.g., Saks and Belcourt, 2006; Blume et al., 2010; Zumrah et al., 2012; Pham et al., 2013). The firms gained the knowledge that supervisor support is significantly important for the employees to fully apply their learned skills in their workplace and to obtain the expected return from the training investment. Thus, the firms need to train their supervisors how to create the effective support for their employees after training to apply their new knowledge, skills and abilities.

As the second finding, transfer of training strongly and directly influenced on firm's performance. Because of the higher rate of transfer of training, the organizations gained the higher performance improvement such as higher product quality, employee satisfaction, productivity, new product/idea development, and lower accidental problems. This finding strongly supported the previous finding of (Saks and Burke-Smalley, 2014). They found the direct relationship between transfer of training and firm's performance. According to this result, the firms accepted that transfer of training can actually create and promote firm's performance. If the firms can upgrade the rate of the transfer of training, firm's performance will appear as the result. On the other hand, because of the poor transfer of training, the firms will face a wasteful training expenditure.

The third finding was that transfer of training fully mediated the relationship between supervisor support and transfer of training. Without transfer of training, the expected outcomes from training investment



or firm's performance could not be realized. Transfer of training played a significant role in creating the firm's performance. Thus, this study contributes to the importance of supervisor support to create firm's performance after the actual application of training outcomes or transfer of training and the organizations yield the expected training results or firm's performance improvement after the costly training programs. Thus, firms need to create the effective supervisor support and transfer of training in the workplace to obtain the expected firm's performance improvement after training.

### **5.1 limitations and directions for future research**

The following points should be taken into account as limitations of this study. First, data was collected only from the manufacturing firms located in the Yangon region, Myanmar, which may limit the generalizability of the findings until the results are replicated and extended in other settings. Second, this study only focused on single independent variables (supervisor support) over transfer of training and firm's performance. There are some other variable such as learning, trainee characteristics, training design, motivation to learn, motivation to transfer, other organizational support factors which can explain the firm's performance in comprehensive way for the future research. Additionally, the measurement of firm's performance was based on the perceptions of employees. The objective measures for firm's performance such as return on assets, return on equity, and return on investment should be considered to evaluate firm's performance. Finally, data should be collected not only from the employees but also from the managerial and supervisory levels and trainers who might have different perceptions about the ways how to create effective transfer of training to capture a successful firm's performance.

### **5.2 Practical implications**

Despite these limitations, the results of the current study contribute to the knowledge on training transfer by illustrating the important role of supervisor support in training transfer process to create firm's performance, especially in the manufacturing firms of one of the Southeast Asian countries, Myanmar. Trainers, human resource managers, and supervisors should focus on the creation of favorable supervisor support to fully apply the trained skills by employees and to yield a complete picture of firm's performance. Further, in terms of theoretical contributions, as the first attempt, this study provides the empirical evidence of the relationship among supervisor support, transfer of training, and firm's performance, particularly in the private manufacturing firms of Myanmar. This study proved that firm's performance is the final result of transfer of training, supporting the previous theoretical and empirical studies (e.g., Holton et al., 2000; Kontoghiorghes, 2002, 2004, Burke and Hutchins, 2008; Saks and Burke-Smalley, 2014). The mediating effect of transfer of training in the relationship between supervisor support and firm's performance suggests that when firms contribute their supervisor to create effective support to transfer the trained skills after the training, it will affect employee behaviors in transferring the trained skills to the workplace to promote firm's performance. By exploring the significant effects or significant relationship among supervisor support, transfer or training and firm's performance, the firms should put more emphasis on these factors to upgrade their firm's performance and to compete with the other firms.

### **5.3 Conclusion**

The findings of this study firstly support the importance of supervisor support, and transfer of training in achieving the expected firm's performance in Myanmar. Employees with favorable supervisor support are more willing to transfer what they have learned to their real workplace for both individual

and their firm's performance. This paper also suggests that further research should identify the factors in order to design strategies for improving transfer of training and the performance of the organizations. Although future research is required, the relationship among supervisor support,

transfer of training, and firm's performance or the effects of supervisor support on transfer of training and firm's performance takes as a first step to highlight a more comprehensive understanding of firm's performance in the transfer of training process.

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