Linking supervisor's role in training programs to motivation to learn as an antecedent of job performance

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Abstract:

According to the literature pertaining to human resource development (HRD), a supervisor's role in training programs has two major characteristics: support and communication. The ability of supervisors to play effective roles in training programs may increase employees' job performance. More importantly, extant research in this field reveals that the effect of the supervisor's role in training programs on job performance is indirectly affected by the motivation to learn. The nature of this relationship is less emphasized in training management literature. Therefore, this study was conducted to measure the effect of the supervisor's role in training programs and the motivation to learn on job performance using 91 usable questionnaires gathered from employees who have worked in a state library in East Malaysia, Malaysia. The outcomes of stepwise regression analysis displayed that the inclusion of motivation to learn in the analysis had increased the effects of

the two supervisor's role elements of support and communication on job performance. This result demonstrates that the motivation to learn acts as a mediating variable in the training model of the organizational sample. The implications of this study to the theory and practice of training programs, methodological and conceptual limitations as well as future directions are elaborated.

Keywords: supervisor's role in training programs, motivation to learn, job performance, Malaysia.

JEL Codes: L20

1. Introduction

Supervisors are considered as the first level of management who are given major duties and responsibilities to lead work groups in organizations (Elangovan & Karakowsky, 1999; Goldstein & Ford, 2002; Noe 2008). As an experienced leader, problem solver and role model at the group level, supervisors often work together with their employers to design, implement and monitor the organizational policies, procedures and plans, including training programs (Comstock, 1994; Robbins & DeCenzo, 2004; Ellinger *et al.*, 2005). A training program is a strategic function of human capital management, where it focuses on developing overall employee competencies to overcome their daily work problems. This may lead to supporting the development and growth of an organization in the future (DeSimone, Warner & Harris, 2002; MacNeil, 2004). In the traditional management perspective, supervisors are given the important responsibility by an employer to identify the daily, routine and short-term employee deficiencies, as well as report such deficiencies to the top management. Top management will then identify the training requirements or training needs to overcome such employee deficiencies (Pfeffer, 1998; Rodrígues & Gregory, 2005).

In an era of global competition, many organizations now have shifted their paradigms from traditional job-based training to organizational business strategies and cultures (MacNeil, 2004; Ellinger *et al.*, 2005 Ismail *et al.*, 2007). Under this approach, supervisors are empowered by an employer to effectively design and

administer training programs to develop useful competencies for future organizational development and change. During the designing stage of training programs, supervisors often work together in tandem with the management team and other employees in establishing objectives, selecting suitable trainers, developing effective lesson plans, selecting program methods and techniques, preparing course materials, scheduling the program, as well as conducting training needs analyses (TNA) (Goldstein & Ford, 2002; Goleman, 2000; Nijman, 2004). In the administration of training programs, supervisors usually refer to the management team and experienced employees to ensure that the implementation of training activities will achieve the set objectives (Elangovan & Karakowsky, 1999; Yamnill & McLean, 2001; DeSimone *et al.*, 2002;). For example, the role of supervisors in administering training programs does not only provide financial and physical facility support, but they also have the capabilities to establish realistic and achievable learning expectations, encourage positive reinforcements, create a positive impetus for the training program, make employees feel comfortable to attend training, and improve and develop employees' competencies (Brinkerhoff & Montesino, 1995; Goleman, 2000).

The supervisor's role is a critical organizational context that may support or resist empoyees to enter and participate in training programs (Noe, 1986, 2008; Blanchard & Thacker, 2007). In this line, many scholars have identfed that support and communication are the two salient features of a supervisor's role that can affect the overall effectiveness of training programs (Facteau *et al.*, 1995; Chiaburu & Tekleab, 2005; Ismail *et al.*, 2007). The supervisor's support is often related to a supervisor who provides encouragement and opportunities to improve employee performance in organizations (MacNeil, 2004; Noe, 2008). In the training context, supervisors often encourage and motivate trainees to attend training programs, help employees before, during and after training programs in terms of time, budgetary support and resources, get employees to be actively involved in decision-making, and guide trainees in applying the new competencies that they have acquired in their workplace (Elangovan & Karakowsky, 1999; Nijman, 2004; Tai, 2006).

Furthermore, supervisor communication is often viewed as the activity or process of expressing ideas or feelings while giving people information, as well as exchanging ideas and information between a person or a group through symbols, actions, written or spoken words in order to impart information and ideas effectively (Lumsden & Lumsden, 1993; Harris *et al.*, 2000). In a training program, supervisors openly deliver information about the procedures, content, tasks and objectives of the training program, conducting discussion about tasks that should be learned, giving detailed explanations about the benefits of attending training programs and providing performance feedback (Harris *et al.*, 2000; Sisson, 2001). Extant research in this area highlights that the ability of supervisors to provide sufficient support and use of good communication styles in training programs may lead to higher level of employee job performance (Baldwin & Magjuka, 1991; McGraw, 1993). Job performance is generally seen as individual employees accomplishing their respective work goals, meeting their expectations, achieving job targets and/or accomplishing a benchmark set by their organizations (Eysenck, 1998; Maathis & Jackson, 2000; Bohlander *et al.*, 2001).

Interestingly, a careful investigation of such relationships reveals that the effect of a supervisor's role in training programs on employees' job performance is indirectly influenced by employee motivation to learn (Cohen & Levinthal, 1990; Farr & Middlebrooks, 1990; Tracey et al., 2001). Although the nature of this relationship is interesting, little is known about the mediating role of the motivation to learn in training management literature (Tracey et al., 2001; Chiaburu & Takleab, 2005; Tai, 2006). Hence, it motivates the researchers to measure the effect of supervisor role in training programs and the motivation to learn on job performance that occur in a selected city-based local authority in Sarawak, Malaysia (EMSTLIBRARY). For reasons of confidentiality, the name of the actual organization is kept anonymous.

Therefore, the purpose of this study is to measure the effect of the supervisor's role in training programs and the motivation to learn on job performance in a state library in East Malaysia, Malaysia (EMSTLIBRARY).

2. Context of the study

EMSTLIBRARY was established to be a major information resource centre and as the hub of information services for the public and private sectors in Sarawak. This organization is also linked to other libraries, archives and information centres in Sarawak, Malaysia and overseas. In-depth interviews were conducted before and during a pilot study to understand the nature of training programs and their impact on individual attitudes and behaviours. Prior to carrying out the pilot study, an in-depth interview was conducted involving two experienced supporting administrative staff.

During the pilot study, an in-depth interview was done involving an assistant human resource manager, head of the training unit, and eight experienced supporting staff who worked in the organization. Information gathered from the interviews shows that the training and development program is one of the important tasks of the Human Resource Division. All employees are entitled to attend soft and hard skills training programs through in-house training and external training companies. Training budget is limited, but several methods, such as in-house training and training of trainer approaches have been employed to increase the capability of the staff in handling information services timely and accurately to foreign and local clients. For example, in order to save a training budget, the management often uses a training-for-trainer approach whereby a few selected staff (e.g., manager and supervisor), are sent to attend external training programs (e.g., at the National Institute of Public Administration, public universities and Malaysian National Library). After attending such training programs, they are required to conduct formal and/or informal in-house training programs (e.g., coaching, mentoring, seminar and/or workshop) for their own staff. This approach is often practiced to create a positive learning culture, knowledge sharing and enhance competencies among staff. In managing training programs, supervisors have been provided support and have practiced good communication styles to motivate technical and administrative employees learn and apply new competencies in the workplace.

A thorough investigation of the in-depth interview results showed that the ability of supervisors to provide material and moral support as well as to practice good communication styles (e.g., provide constructive feedback and open discussion)

have invoked employees' motivation to learn and this may lead to an increased job performance in the workplace. Although the nature of such relationships is interesting, little is known about the mediating role of motivation to learn in the training program model of the studied organization.

3. Literature review and hypotheses development

Several scholars such as Knowles (1989), Noe (2008) and Blanchard and Thacker (2007) state that the motivation to learn consists of two major components: motivation and learning. Motivation is often defined as direction, persistence and amount of effort that may be expanded by an individual to achieve his/her particular objective. Learning is usually viewed from the human, cognitive and behavior perspectives. For example, cognitive theorists define learning as a relatively permanent change in cognition occurring as a result of experience. Meanwhile, behavior theorists define learning as "a relatively permanent change in behavior in response to a particular stimulus or set of stimuli" (Noe, 1986). Based on cognitive and behavior perspectives, motivation to learn may be defined as an intense, persistence and the direction of learning new knowledge, skills and attitudes are affected by an individual who has clear goals, puts a high value on outcomes, has high self-efficacy and satisfied with supervisors' treatments (Adams, 1963, 1965; Vroom, 1964, 1973; Wood & Bandura, 1989; Locke & Latham, 1990). If an individual possesses a high level of motivation to learn, this will increase his/her ability to overcome discouraging learning factors. Consequently, it may motivate an individual to follow, involve and commit to learning activities in order to improve the individual's work attitude and behavior, especially job performance (Axtell *et al.*, 1997; Guerrero & Sire, 2001; Nijman, 2004).

In this sense, within a training program perspective, the ability of supervisors to provide sufficient support (e.g. encouragement and guidance) and use communication openness in training management (e.g. feedback and discussion) will invoke their employees' motivation to learn and which in turn lead to higher job performance (Martocchio & Webster, 1992; Tsai & Tai, 2003; Blanchard & Thacker, 2007).

Relationship between supervisor's role, motivation to learn and job performance

Several recent studies have used an indirect effect model to examine training administration and found that effect of supervisor's role in training programs on job performance were indirectly affected by the motivation to learn. For example, several studies about supervisor's role in training programs based on a sample of 45 trainees in UK organizations (Axtell *et al.*, 1997), and 100 technical employees in North Kuching City Hall, Malaysia (Ismail *et al.*, 2008a) generally showed that properly implemented supervisor's role in training programs had invoked employees' motivation to learn up to date knowledge and skills, this could lead to higher job performance in the workplace. Specifically, two surveys about supervisor communication in training programs were carried out based on a sample of 126 employees in Northern Taiwan Tai (2006), and 100 technical employees in North Kuching City Hall, Malaysia (Ismail *et al.*, 2007). Meanwhile, three surveys about supervisor support in training programs were conducted based on a sample of 119 employees who attended training program in a large organization in USA (Chiaburu & Takleab, 2005), 179 trainees and 32 supervisors at certain US organizations (Nijman, 2004), and 100 technical employees in North Kuching City Hall, Malaysia (Ismail *et al.*, 2007). The findings of these studies advocate that the willingness of supervisors to provide better explanations about the training plans and the ability of supervisors to properly provide training supports had invoked employees' motivation to learn, which in turn, led to higher job performance in the organizations.

These studies are consistent with the notion of motivation to learn theories. First, Locke and Latham's (1990) goal setting theory postulates that goals direct individuals to perform a task. Application of this theory in training management shows that the ability of a supervisor to design training objectives that meet employees' needs and provide clear explanations about the procedures of attaining the goals will strongly increase employees' motivation to learn. As a result, it may lead to increased job performance (Mathieau *et al.*, 1992; Goldstein & Ford, 2002). Second, Wood and Bandura's (1989) social learning theory (SLT) reveals that self-efficacy reinforces individuals' performance. Application of this theory in training programs shows that the ability of a supervisor to encourage employees learning a proper technique and providing clear explanations about the procedures of

attaining the goals will strongly increase employees' motivation to learn. Consequently, it may lead to increased job performance (Brown *et al.*, 2001; Goldstein & Ford, 2002).

Third, Adams' (1963; 1965) equity theory states that fair or unfair treatment has a significant impact on individual's attitude and behavior. The application of this theory in training management shows that employees who receive sufficient support from their supervisors while applying and attending training programs will perceive equity. If individuals feel that they are fairly treated and supported by their supervisors, this will subsequently invoke their motivation to learn, which in turn, lead to an increase in job performance (Mathieu *et al.*, 1992; Chiaburu & Takleab, 2005).

Finally, Vrooms' (1964;1973) expectancy theory highlights that an individual will perform certain actions if he/she perceives such actions may bring valued outcomes. The application of this theory in training management shows that the ability of a supervisor to openly and honestly communicate the value of attending training programs and its importance of learning new competencies will strongly increase employees' motivation to learn. As a result, it may lead to increased job performance (Cohen & Levinthal, 1990; Farr & Middlebrooks, 1990).

The above literature has been used as the platform and foundation to develop a conceptual framework for this study as shown in Figure 1.
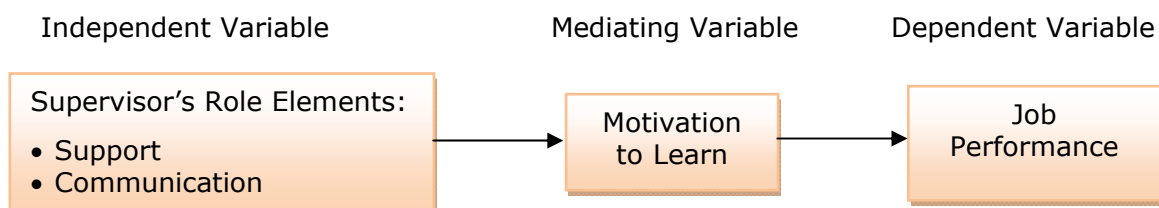

Figure 1. "The motivation to learn mediates the relationship between supervisor's role in training programs and job performance". Source: authors

Based on the framework, it seems reasonable to assume that the ability of supervisors to play proper roles in training programs will affect EMSTLIBRARY employees as this has influenced overseas employees. Motivation to learn theories

further suggest that the ability of supervisors to provide sufficient support and practice with good communication skills will motivate employees to update their knowledge, acquire new skills and positive attitudes in training programs. As a result, it may lead to an increased job performance in organizations. Therefore, it can be hypothesized that:

H1: Motivation to learn positively mediates the effect of supervisor support on job performance

H2: Motivation to learn positively mediates the effect of supervisor communication on job performance

4. Methodology

This study used a cross-sectional research design, which allowed the researchers to integrate training management literature, the in-depth interview, the pilot study and the actual survey as a main procedure to gather data for this study. The use of such methods may gather accurate and less biased data (Cresswell, 1998; Sekaran, 2000). At the initial stage of this study, in-depth interviews were conducted before and during the pilot study. Before conducting the pilot study, an in-depth interview was conducted involving two experienced supporting administrative staff. Then during the pilot study, another in-depth interview was done involving an assistant human resource manager, head of Training Unit, and eight experienced supporting staff who work in the organization. They are selected based on purposive sampling where the employees have good knowledge and experience about the design and administration of training programs. Information gathered from such employees helped the researchers to understand the nature of supervisor's role, motivation to learn characteristics, job performance features, as well as the relationship between such variables in the target organization. After transcribing, categorizing and comparing the information with relevant theoretical and empirical evidence, the triangulated outcomes were used as a guideline to develop the content of the survey questionnaire for the pilot study. Next, a session was initiated for discussing the items in survey questionnaire with the above participants in order to verify the content and format of the questionnaire for the actual study. The back translation technique was used to translate the survey

questionnaires in Malay and English; this may increase the validity and reliability of the instrument (Van Maanen, 1983; Wright, 1996).

Measurement of variables

The survey questionnaire consisted of four sections. Firstly, supervisor support had four items that were derived from the training research literature (Tsai & Tai, 2003; Chiaburu & Takleab, 2005; Tai, 2006; Ismail *et al.*, 2007). Secondly, supervisor communication had five items that were derived from the transfer of training literature (Foxon, 1993; Xiao, 1996; Yamnill & McLean, 2001; Ismail *et al.*, 2007). Thirdly, motivation to learn had four items that were based on the training program literature (Foxon, 1993; Noe, 2008; Tsai & Tai, 2003; Rodríguez & Gregory, 2005). Finally, job performance had five items that were based on job performance literature (Lawler & Hall, 1970; Hvang *et al.*, 2004). All the items used in the questionnaire were measured using a 7-item scale ranging from 'strongly disagree' (1) to 'strongly agree' (7). Demographic variables were used as the controlling variable because this study also focused on employees' attitude.

Analytic procedures

The researchers had obtained an official approval to conduct the study from the head of the target organization and also received advice from him about the procedures of conducting the survey in his organization. The targeted population for this study was 98 employees who have worked in the selected organization. After considering the organizational rules, a convenience sampling technique was used to distribute the questionnaire to all employees who willing to participate through the Human Resource office. Of the number, 91 usable copies of the questionnaire were returned to the researchers, yielding a response rate of 92.86 percent. The survey questions were answered by participants based on their consent and voluntary basis. The number of this sample exceeds the minimum sample of 30 participants as required by probability sampling technique, showing that it may be analyzed using inferential statistics (Sekaran, 2000; Leedy & Ormrod, 2005).

The Statistical Package for Social Science (SPSS) version 16.0 was used to analyse the data from the questionnaire. Firstly, exploratory factor analysis (EFA) was used to assess the validity and reliability of measurement scales (Nunally &

Bernstein, 1994; Hair et al, 1998). Relying on the guidelines set up by these statisticians, a factor analysis with direct oblimin rotation was first done for all the items that represented each research variable, and this was followed by other tests, that is, Kaiser-Mayer-Olkin Test (KMO), Bartlett's test of sphericity (BTS), eigenvalue, variance explained and Cronbach alpha (α).

Secondly, analysis of variance (ANOVA), Pearson correlation (r) analysis and descriptive statistics were conducted to analyze the constructs and the usefulness of the data set (Tabachnick et al., 2001; Yaacob, 2008). Finally, Stepwise regression analysis was utilized to test the mediating hypothesis because it can assess the magnitude of each independent variable, and vary the mediating variable in the relationship between many independent variables and one dependent variable (Baron & Kenny, 1986; Foster *et al.*, 1998). According to Baron and Kenny (1986), the mediating variable can be considered when it meets three conditions: first, the predictor variables are significantly correlated with the hypothesized mediator. Second, the predictor and mediator variables are all significantly correlated with the dependent variable. Third, a previously significant effect of predictor variables is reduced to non-significance or reduced in terms of effect size after the inclusion of mediator variables into the analysis (Wong *et al.*, 1995). In this regression analysis, standardized coefficients (standardized beta) were used for all analyses (Jaccard *et al.*, 1990).

5. Results

Table 1 shows that most of the respondent characteristics were male (51.6%), ages ranging from 20 to 39 years old (80.3%), MCE/SPM holders (20.9%), length of service with less than 2 years (74.8%), staff who attended the training within working hours (43.4%), and those who had learning experience in technical field (54.3%).

Table 2 and Table 3 show the results of the validity and reliability analyses for measurement scales. The original survey questionnaire consisted of 18 items, which related to four variables: support (4 items), communication (5 items), and motivation to learn (4 items) and job performance (5 items).

Gender (%)	Education (%)	Type of Training (%)
Male = 51.6	Degree = 22	During official hours = 43.4
Female = 48.4	Diploma/STP = 15.4	Non-official hours = 21.8
	MCE/SPM = 20.9	Both =34.8
Age (%)	Length of Service (%)	Learning Experience (%)
20-29 = 33	>1 year = 39.6	Technical skills = 54.3
30-39 = 47.3	1-2 years = 35.2	Non-technical/ = 32.5
40-49 = 16.5	3-4 years = 6.6	administrative skills
>49 = 3.3	5 years = 18.7	Both = 13.2

Note: SRP/LCE/PMR: Sijil Rendah Pelajaran/Lower Certificate of Education/ Penilaian Menengah Rendah;
SPM/MCE: Sijil Pelajaran Malaysia/ Malaysia Certificate of Education;
STPM: Sijil Tinggi Pelajaran Malaysia

Table 1. "Respondent characteristics". Source: Authors

Variable	Item	Component			
		1	**2**	**3**	**4**
Supervisor Support	gives enough time for me to practice the skills that I have learned during training		.90		
	encourages me to attend training program		.92		
	cares about my needs to have knowledge and skills assists me to apply the knowledge and skills learned from the training		.66		
Supervisor Communication	clearly explains the objective of attending training program	.76			
	gives information regarding the training program	.76			
	gives feedback regarding the way I apply the knowledge and skills learned from training program	.73			
	provides feedback, instruction or performance appraisal clearly	.75			
	praises me when I do my job well	.76			
Motivation to Learn	interested to learn new knowledge and skills in training				.87
	interested to attend training programs that is related to area of work.				.62
	gives full attention regarding the content of the training program.				.77
Job Performance	motivates to learn something new				.59
	feels more confident upon attending training			.68	
	job outputs were more quality upon attending training			.85	
	able to solve any work-related problems			.41	
	able to work with minimum guidance and supervision			.51	
	able to solve any work-related problems			.43	

Table 2. "Item validity". Source: Authors

The factor analysis with direct oblimin rotation was first carried out for all the variables. Then, the Kaiser-Mayer-Olkin Test (KMO) which is a measure of sampling adequacy was conducted for each variable and the results indicated that it was acceptable.

Relying on Hair et al. (1998) guidelines, these statistical analyses showed that: (1) all research variables exceeded the acceptable standard of Kaiser-Meyer-Olkin's

value of 0.6, (2) all research variables were significant in Bartlett's test of sphericity, (3) all research variables had eigenvalues larger than 1, and (4) the items for each research variable exceeded factor loadings of 0.40 (Hair et al., 1998). Besides that, all research variables exceeded the acceptable standard of reliability analysis of 0.70 (Nunally & Bernstein, 1994). These statistical analyses confirm that the measurement scales met the acceptable standard of validity and reliability analyses as shown in Table 2 and Table 3.

Measure	Items	Factor Loadings	KMO	Bartlett's Test of Sphericity	Eigenvalue	Variance Explained (%)	Cronbach Alpha (α)
Supervisor Support	4	.66 - .87	.76	87.57	2.33	58.30	.76
Supervisor Communication	5	.73 - .76	.60	104.37	2.37	47.49	.72
Motivation to learn	4	.59 - .87	.75	184.46	2.75	68.74	.84
Job Performance	5	.41 - .85	.75	119.84	2.54	63.42	.79

Table 3. "The results of validity and reliability analysis for measurement Scales". Source: authors

The variance analysis, Pearson correlation analysis and descriptive statistics were used to analyze the research variables used in this study. Firstly, the analysis of variance techniques were used to compare the mean scores between two or more groups in the studied organization. In this case, independent samples t-tests were used to compare two different (independent) groups of people (*i.e.*, gender) and ANOVA is used to compare three and more different (independent) groups of people (*i.e.*, age) (Hair *et al.*, 1998; Yaacob, 2008). Outcomes of one-way ANOVA showed that learning experience was found to have a significant difference with supervisor support, which means that supervisor support was found to be differently perceived by learning difference.

Table 4 shows the results of Pearson correlation analysis and descriptive statistics. The mean values for the variables are from 3.2 to 3.6, signifying that the levels of supervisor's support, supervisor communication, motivation to learn and job performance ranging from moderately high (3) to highest level (7). The correlation coefficients for the relationship between the independent variable (supervisor support and supervisor communication) and the mediating variable (motivation to

learn) and the dependent variable (job performance) were less than 0.90, indicating that the data were not affected by serious collinearity problem (Hair, *et al.*, 1998).

Variable	Mean	Standard Deviation	Pearson Correlation Analysis			
			1	2	3	4
1. Supervisor Support	3.2	.41	1			
2. Supervisor Communication	3.4	.36	.50**	1		
3.Motivation to Learn	3.6	.40	.12	.19	1	
4.Job Performance	3.3	.41	.45**	.43**	.22*	1

Note: Significant at p*<0.05;**p<0.01

Table 4. "Pearson correlation analysis and descriptive Statistics". Source: authors

Table 5 shows that demographic variables (i.e., gender, age, education, length of service, type of training and learning experience) were entered in Step 1 and then followed by entering independent variable (supervisor support and supervisor communication) in Step 2, and mediating variable (motivation to learn) in Step 3. Job performance was used as the dependent variable. An examination of multicollinearity in the coefficients table shows that the tolerance value for the relationship between the independent variable (supervisor support) and the dependent variable (i.e., job performance) was .77, and the relationship between supervisor communication and job performance was .86. While the tolerance value for the relationship between supervisor's role, motivation to learn, and job performance was .88. These tolerance values were more than the established tolerance value of .20 (as a rule of thumb), indicating the variables were not affected by multicollinearity problems (Fox, 1991; Tabachnick *et al.*, 2001).

Table 5 shows the results regression analysis that was summarized in the three steps. In step 1, the length of service was only found to be a significant predictor of job performance, accounting for 14 percent of the variance in the dependent variable. Step 2 showed that the supervisor support (ß=.34, p<0.01) was found to be a significant predictor of job performance, whereas supervisor communication (ß=.17, p<0.05) was not a significant predictor of job performance. The inclusion of these two variables in Step 2 had explained 29 percent of the variance in the dependent variable. The inclusion of motivation to learn in Step 3 of the process reveals that motivation to learn is a mediating variable for the relationship between

supervisor's role in training programs (i.e., supervisor support and supervisor communication) and job performance (ß=.23, p<0.05), therefore H1 and H2 were fully supported. This relationship explains that before the inclusion of motivation to learn into Step 2, supervisor support was significantly correlated with job performance (Step 2:ß=.34, p<0.01) while supervisor communication was not significantly correlated with job performance (Step 2:ß=.17, p<0.05). As shown in Step 3, (after the inclusion of motivation to learn into this step), the previous significant relationship between supervisor support and job performance did not change to insignificant (ß=.33, p<0.01), but the effect size of such relationship between variables were decreased. Conversely, the previous insignificant relationship between supervisor's communication and job performance did not change to significant (ß=.14, p>0.05) when motivation to learn was entered in Step 3. In terms of explanatory power, the inclusion of motivation to learn in Step 3 had explained 37 percent of the variance in the dependent variable. In fact there was an increase in the strength of relationship between supervisor's role in training programs, motivation to learn and job performance in Step 3, signalling that motivation to learn acts as a partial mediating variable in the training program model of the studied organization.

Variables	Dependent variable (Job performance)		
	1	2	3
Controlling variables Gender	-.16	-.12	-.15
Age	-.12	-.14	-.16
Education	.08	.05	.08
Length of service	-.25*	-.11	-.10
Type of training	-.06	.02	.01
Learning experience	-.20	.01	.04
Independent variables Supervisor support		.34**	.33**
Supervisor communication		.17	.14
Mediating variable **Motivation to learn**			**.23***
R Square	.14	.29	.37
Adjusted R square	.08	.22	.26
R Square change	.14	.15	.05
F	2.25*	4.20***	4.50***
F change	2.25*	8.79***	5.51*

Note: Significance at *p<0.05; **p<0.01; ***p<0.001

Table 5. "Result for stepwise regression analysis". Source: authors

6. Discussion and implications

The findings of this study demonstrate that motivation to learn does act as a partial mediating variable in the relationship between supervisor's role and job performance in the organizational sample. In the organizational context, supervisors have provided adequate support (e.g., encourage employees to attend training programs and apply newly acquired knowledge and skills that they gain from training programs in their jobs) and used good communication practices (e.g., provide feedback, encourage discussion and openly deliver information on training) when dealing with training programs. The majority of the employees perceive that such supervisors' role had increased their motivation to learn. When employees' motivation to learn increased this may lead to higher job performance in the organization.

This study provides significant impacts on three major aspects: theoretical contribution, robustness of research methodology, and contribution to the human resource development practitioners. In terms of theoretical contribution, this study revealed two important outcomes. Firstly, motivation to learn partially mediated the effect of supervisor support on job performance. This finding is consistent with the studies by Gupta and Govindarajan (2000), Chiaburu and Takleab (2005) and Ismail *et al.* (2007). Secondly, motivation to learn mediated the effect of supervisor communication on job performance. This result is consistent with the studies by Brinkerhoff *et al.* (1995), Brown *et al.* (2001) and Ismail *et al.* (2007). In sum, the findings of this study show that the ability of supervisors to play proper roles has not directly affected job performance, but it is partially mediated by employees' motivation to learn. For example, the ability of supervisors to play proper roles in training programs will first invoke employees' motivation to learn. If employees' motivation to learn has increased this may lead to an increased job performance in the workplace. The notion of motivation to learn has been successfully applied within the training management models of the studied organization. In this sense, it has supported and broadened training research literature mostly published in western countries.

With respect to the robustness of the research methodology, the survey questionnaire that were developed based on the training management literature, the in-depth interviews, the pilot study and the survey questionnaires have met the

acceptable standard of validity and reliability analysis. Hence, this may lead to the production of accurate and reliable findings.

Regarding practical contributions, the findings of this study can be used as a guideline by HRD managers to improve the efficiency and effectiveness of training programs in their organizations. This objective may be achieved if the management implements several important suggestions: firstly, customize training contents and methods according to organizational needs and wants. For example, the content of training programs for management employees should impart advanced human skills that may help them to understand individuals' cognitive, emotion and psychomotor. In order to increase the capability of management employees, professional trainers should be hired to teach them properly implementing interpersonal communication skills, managing change, conflict and problem solving techniques in the workplace. Secondly, allow supervisors to be involved in higher level training committees so that they may clarify the needs and expectations of employees at the grass root level. Thus, it may help to establish appropriate training modules that can support organizational and human resource management's strategies and goals. Thirdly, change in the human resource policies from hiring employees based on conforming to organization policies and procedures to hiring employees based on creativity and innovations. This new hiring perspective will help management to hire employees who possess higher levels of knowledge, experience and competencies. Their capabilities may be used to train operational employees in terms of attitude and working styles, as well as to handle employees' demands with better treatment like showing more respect, be honest and accountable. Finally, review compensation and benefits system for supervisors based on current organizational strategy and goals. For example, internal organizational changes will increase duties and responsibilities of supervisors, this may affect health, safety and stress at the workplace. These problems may be decreased if the type, level and/or amount of rewards (e.g., pay rate and pay rise) are increased according to supervisors' workloads and performance. If organizations heavily consider these suggestions, this may result in an increase in supervisors' motivation to support organizational and departmental training's strategies and goals.

7. Limitations and directions for future research

The conclusion drawn from the results of this study should consider the following limitations. Firstly, the data was only taken once during the duration of this study. Therefore, it did not capture the developmental issues such as intra-individual change and restrictions of making inference to participants and/or causal connections between variables of interest. Secondly, this study only examines the relationship between latent variables and the conclusion drawn from this study does not specify the relationship between specific indicators for the independent variable, mediating variable and dependent variable. Thirdly, this study only focused on particular elements of a supervisor's role and neglected other important factors (e.g., employee's readiness, leadership styles of the supervisor and supervisors training framing). Fourthly, other training outcomes (e.g., job satisfaction, job commitment, job turnover and training transfer) that are significant for organizations and employees are not discussed in this study. Fifthly, although a substantial amount of variance in dependent measures explained by the significant predictors is identified, there are still a number of unexplainable factors that can be incorporated to identify the causal relationship among variables and their relative explanatory power (Tabachnick *et al.*, 2001). Finally, the sample for this study was taken using a convenient sampling technique in a single public organization. These limitations may decrease the ability of generalizing the results of this study to other organizational settings.

The conceptual and methodology limitations of this study need to be considered when designing future research. Firstly, the organizational and personal characteristics that act as a potential variable and can influence the effectiveness of supervisor's role in training programs should be further explored. If organizational and personal characteristics are used in research, this may provide meaningful perspectives for understanding the individual differences and similarities that affect training outcomes. Secondly, the weaknesses of cross-sectional research design may be overcome if longitudinal studies are used to collect data and describe the patterns of change and the direction and magnitude of causal relationships between variables of interest. Thirdly, the findings of this study may produce different results if this study is done in more than one organization. Fourthly, as an extension of the motivation to learn, other theoretical constructs of organizational climate (e.g., transfer of competency, training policy

and procedures, facilities, budget and employee readiness) needs to be considered because they have been widely recognized as an important link between supervisor support and training outcomes (Yamnil & McClean, 2001; Blanchard & Thacker, 2007; Ismail *et al.*, 2007; Ismail *et al.*, 2008b). The importance of these issues needs to be further discussed in future researches.

8. Conclusion

The findings of this study confirm that motivation to learn acts as a partial mediating variable in the relationship between a supervisor's role and job performance. This result has supported and broadened training research literature mostly published in Western organizational settings. Therefore, current research and practice within training management models needs to consider motivation to learn as a vital aspect of the organizational training system where increasing individuals' motivation to learn may strongly induce subsequent positive personal outcomes (e.g., satisfaction, commitment, trust, good working ethics and performance). Hence, these positive outcomes may direct employees to sustain and achieve organisational competitiveness in the current globalized economy.

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