

## Training Motivation as Mediator of the Relationship between Training Administration and Training Transfer

(*Motivasi Latihan Sebagai Pembolehubah Pengantara dalam Perhubungan di antara Pentadbiran Latihan dan Pemindahan Latihan*)

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### ABSTRACT

*This study examines the relationship between training administration, training motivation and training transfer. A survey method was employed to gather self-administered questionnaires from employees who work at a military oriented health organization. The outcomes of SmartPLS path model analysis revealed two important findings; firstly, the relationship between communication and training motivation is significantly related with training transfer. Secondly, relationship between delivery and training motivation is significantly related with training transfer. The result confirms that training motivation mediates the relationship between training administration and training transfer in the organizational sample. Further, this study provides discussion, implications and conclusion.*

*Keywords: Training administration; training motivation; training transfer*

### ABSTRAK

*Kajian ini meneliti hubungan di antara pentadbiran latihan, motivasi latihan dan pemindahan latihan. Kaedah tinjauan telah digunakan untuk mengumpul borang soal selidik daripada pekerja yang terlibat di sebuah organisasi kesihatan berorientasikan ketenteraan. Keputusan analisis model laluan SmartPLS menunjukkan dua dapatan yang penting: pertama, komunikasi dan motivasi latihan mempunyai hubungan yang signifikan dengan pemindahan latihan. Kedua, kaedah penyampaian dan motivasi latihan mempunyai hubungan yang signifikan dengan pemindahan latihan. Hasil kajian ini mengesahkan bahawa motivasi latihan bertindak sebagai pemboleh ubah pengantara yang berkesan antara pentadbiran latihan dan pemindahan latihan dalam organisasi kajian. Seterusnya, kajian ini menyediakan perbincangan, implikasi dan kesimpulan.*

*Kata kunci: Pentadbiran latihan; motivasi latihan; pemindahan latihan*

### INTRODUCTION

Training is one of the important roles of human resource department of any organization. Training is often viewed as a central function of human resource management department where human resource (HR) administrators will often work together with line managers to design the various types of on-the job and off-the job training programs for employees who work in different job categories. Traditionally, training designs are often implemented by HR administrators to develop basic skills and apply them in order to overcome current job problems and increase daily job performance. Many scholars like Blanchard and Thacker (2004), Noe et al. (2009), Noe (2010) and Azman et al. (2013) view that this training approach is most suitable to organizations that operate in less competitive environments and high market stability, but it is not adequate to enable employees coping with rapid changes in dynamic organizations.

In dealing with a more dynamic and robust organizational climates, most training programs have shifted their paradigms towards a long term objective based training to support organizational strategy and goals (Azman et al. 2013; Noe 2010). Under this new paradigm, HR administrators have taken proactive actions to focus on improving intangible assets and human capital such as imparting new competencies, changing negative attitudes, matching knowledge and skills in lieu to organization needs, preparing employees to face new challenges, adapting to advanced technologies, employing a continuous improvements as well as promoting organizational learning (Azman & Nurul 2010; Noe 2010). If these training programs are well executed, employees would be able to upgrade their capabilities in terms of new knowledge, advanced skills and abilities as well as shaping new positive attitudes. Hence, it may lead employees to support organizational strategic missions (Azman & Nurul 2010; Noe 2010).

Undeniably, having successful training administration is crucial. According to recent organizational training studies, successful training administration usually has two important dimensions: communication and delivery (Inman 2006; Teven 2010). In a training program environment, when delivering key messages, it is important to ensure that messages are clearly communicated and with integrity. As communication is concerned, communication strategies are plans for communicating information related to a specific issue, event, situation, or audience. Communication is generally defined as openness between trainers and trainees in exchanging information on matters pertaining to the advantages of attending training programs, explaining the course contents, delivering and exchanging knowledge, and overcoming interpersonal obstacles before, during and after training programs (Azman et al. 2009b; Noe 2010). In more recent studies on two intensive care units at US academic medical centre, communication has also been found as one of the most critical factor in ensuring the effectiveness of training transfer (Spector et al. 2012).

Transfer of training, nevertheless it is often the only effective measure of training success. Transfer of training was defined as the extent to which the knowledge, skills and attitudes gained from the training environment are retained and used in the workplace environment. Hence, communication is an integral function to ensure the transfer of training has been delivered efficiently. The communication goal is achieved through the use of communication strategies, communication skills, process tasks, and cognitive appraisals. Baldwin and Ford (1988) highlighted that transfer of training has concentrated on communication, individual differences, and the work environment. Delivery as the supportive component for communication, is broadly viewed as hardware and software tools and the methods that are employed by instructors to deliver learning activities and track employee progress during training programs and when return to their organizations (Hall 2005; Klein et al. 2006; Noe 2010).

Present research in workplace learning highlights that the ability of administrators to appropriately design and implement training programs may induce positive individual outcomes, especially training motivation (DeSimone et al. 2002; Inman 2006; Noe 2010). Training motivation refers to individuals who have high inner desires that strongly encourage them to attend and learn necessary knowledge, up to date skills, new abilities and positive attitudes in training programs (Azman & Nurul 2010; Machin & Treloar 2004; Noe 2010). Training motivation has also been largely seen as a mediating function for training effectiveness (Bell & Ford 2007; Rowold 2007; Gegenfurtner et al. 2009). However, job utility or the degree to which training can be useful in job performance was what exactly contributes towards high training motivation (Aziz & Ahmad 2011).

Interestingly, a further examination of literature in this field reveals that effect of training administration

on training transfer is indirectly affected by training motivation (Elias & Rahman 1994; Teven 2010). Motivation to acquire has been long renowned as a critical predecessor to training consequences (e.g., Maier 1973; Noe 1986). They also stated that research has confirmed that a trainee's motivation before training influences cognitive and skill-based learning outcomes as well as training transfer. Bhawani (2008) pointed out that transfer of training was identified as a complex process and dependent upon motivation of the learner, the organizational environment and culture including supervisory support, and the instructional design, as well as job significance of the training program. Training transfer is broadly defined as employees reallocating and use the knowledge, skills, abilities and attitudes gained from training programs when entering to the real workplace (Azman et al. 2009b; Mohamad 2006; Saks & Belcourt 2006).

Within an organizational training model, many scholars view that communication, delivery, training motivation and training transfer are distinct, but strongly interrelated constructs. For example, the ability of management to adequately implement comfortable communication and correctly select delivery modes will motivate employees to attend and learn in training programs. Consequently, it may lead to higher training transfer (Hana 2005; Teven 2010).

Even though the nature of this relationship is significant, little is known about the mediating effect of training motivation in the workplace training research literature (Elias & Rahman 1994; Teven 2010). Many scholars argue that the mediating variable of training motivation has been given less emphasis in previous studies because they have focused more on the internal properties of training administration and employed a simple correlation method to assess respondent attitudes toward training administration, and measure the degree of association between training administration and training motivation. Conversely, the role of human psychology (e.g., motivation) in influencing the effect size and nature of the relationship between training administration and training transfer has been ignored in the workplace training administration models (Chaloner 2006; Inman 2006). Consequently, findings from these studies have not provided adequate empirical evidence to be used as important guidelines by practitioners in understanding the complexity of training administration, and formulating action plans to enhance the effectiveness of training programs in agile organizations (Elias & Rahman 1994; Teven 2010). Thus, this situation inspires the researchers to further explore the nature of this relationship.

#### PURPOSE OF THE STUDY

This study has three major objectives: firstly, this study aims at examining the relationship between communication, and training motivation. Secondly, this study is set to measure the relationship between delivery

and training motivation. Thirdly, is to examine the relationship between communication, training motivation and training transfer.

LITERATURE REVIEW

RELATIONSHIP BETWEEN TRAINING ADMINISTRATION AND TRAINING MOTIVATION

In successful organizations, the administration of training programs has often emphasized on two salient dimensions: communication and delivery (Teven 2010; Weissbein et al. 2011). In general, communication refers to openness in information exchange between trainers and trainees while delivery includes the design, method and tools used to deliver learning activities (Hall 2005; Klein et al. 2006; Noe 2010). Many previous studies using a direct effect model were conducted to examine training administration based on different samples, such as perceptions of 147 marriage and family therapy nursing trainees in United States (Inman 2006), perceptions of 100 participants from the non-UK sites of the aircraft manufacturer Airbus (Chaloner 2006), perceptions of 91 participants from a state of library in Malaysia (Azman et al. 2009), perceptions of 110 participants from a state public work agency in Malaysia (Azman et al. 2010), and perceptions of 113 participants from a military based health organization in Malaysia (Azman et al. 2013). Findings from these surveys reported two important findings: first, the willingness of the administrators to implement communication openness (e.g., good speaking and listening, comfortable language and useful dialogue) had increased training motivation (Chaloner 2006; Inman 2006). Second, the willingness of administrators to select the right delivery modes (e.g., teaching aids and methods) had increased training motivation (Chaloner 2006; Inman 2006). Based on the evidence, it can be hypothesized that:

- H<sub>1</sub> There is a positive relationship between communication and training motivation
- H<sub>2</sub> There is a positive relationship between delivery and training motivation

RELATIONSHIP BETWEEN TRAINING ADMINISTRATION, TRAINING MOTIVATION AND TRAINING TRANSFER

Furthermore, several extant studies using an indirect effects model were conducted to investigate the effectiveness of training administration models based on different samples, such as perceptions of 188 Arts Students from a local university in Malaysia (Elias & Rahman 1994), perceptions of educational superintendents in Palestine (Hana 2005), and perceptions of 266 employees in a wide variety of organizations in United States (Teven 2010). Findings from these surveys reported that the willingness of administrators to implement communication openness (e.g., good speaking and listening, comfortable language and useful dialogue), and select the right delivery modes

(e.g., teaching aids and methods) had motivated trainees to attend and learn necessary knowledge, up to date skills, new abilities and positive attitudes in training programs. As a result, it could lead to an increased training transfer in the respective organizations (Elias & Rahman 1994; Hana 2005; Teven 2010).

These studies are consistent with the notion of motivation theory. For example, Vroom's (1964) expectancy theory explains that individuals will perform certain action if they perceive that their action will bring valued outcomes. Besides that, Locke and Latham's (1990) goal setting theory highlights that clarity of goals may guide an individual to perform job. Application of these theories in a training program model explains that the ability of administrators to properly implement communication openness and select the right delivery methods will invoke trainees' motivation to attend and learn necessary knowledge, up to date skills, new abilities and positive attitudes in training programs. As a result, it may lead to an increased training transfer in organizations (Elias & Rahman 1994; Hana 2005; Teven 2010).

CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESES

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

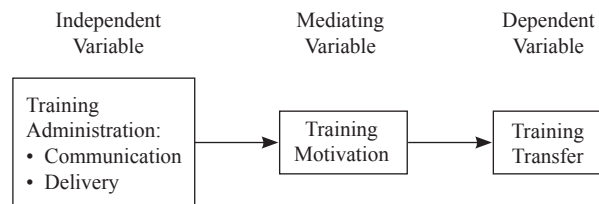


FIGURE 1. Conceptual framework

Based on the framework, it can be hypothesized that:

- H<sub>3</sub> The relationship between communication and training transfer is mediated by training motivation.
- H<sub>4</sub> The relationship between delivery and training transfer is mediated by training motivation.

METHODOLOGY

This study employs a cross-sectional research design that allows the researchers to combine the training administration literature, the pilot study and the actual survey as a main procedure to gather the data for this study. Using this method may increase the ability to gather accurate data, decrease bias data and increase quality of data being collected (Cresswell 1998; Sekaran & Bougie 2010). The context of this study is a military-based health organization in Malaysia. In order to maintain reputation, the name of this organization is kept anonymous. At the

initial stage of data collection, the researchers had drafted the survey questionnaires based on the related literature review. After that, the pilot study was conducted by discussing the questionnaires with four administrators, three medical officers and four allied health officers. They were selected using a purposive sampling technique. The respondents of this pilot survey have working experiences from 4 to 19 years and showed good knowledge and experience about the management of training programs in their organizations. A purposive sample, also called as a judgmental sample, is one that is selected based on the knowledge of a population and the purpose of the study. The subjects are selected based on some characteristics. Purposive sampling can be very useful for situations where you need to reach a targeted sample quickly.

The information gathered from this pilot study helped the researchers to improve the content and format of the survey questionnaires for an actual study. Back to back translation technique was used to translate the survey questionnaires into English and Malay languages in order to increase the validity and reliability of research findings (Cresswell 1998; Sekaran & Bougie 2010).

#### MEASURES

The survey questionnaires used in this study had three sections. Firstly, communication had 4 items, and delivery had 3 items that were adapted from training administration literature (Machin & Fogarty 2004; Noe 2010; Tsai & Tai 2003). Secondly, training motivation was measured using 4 items that were modified from training motivation literature (Machin & Fogarty 2004; Noe 2010; Rodrigues & Gregory 2005; Tai 2006). Finally, training transfer was measured using 4 items that were adjusted from training transfer literature (Azman & Nurul 2010; Mohamad 2006; Tai 2006). All items used in the questionnaires were measured using a 7-item scale ranging from "strongly disagree/dissatisfied" (1) to "strongly agree/satisfied" (7). Demographic variables were used as controlling variables because this research was focused on employee attitudes.

#### SAMPLE

Data was collected from a military based health organization in Malaysia. The researchers have obtained an official approval to conduct the study from the head of the organization and also received advice from him about the procedures of conducting the survey in his organization. Despite the permission granted to the researchers to conduct this study, the list and information details of employees were not given to the researchers to avoid intrusiveness and to maintain confidentiality. In fact, this condition limits the ability to employ probability sampling techniques in selecting participants for this study (Sekaran & Bougie 2010).

Considering the constraints of the organization rules and regulations, as well as the duration of study and budget, the survey questionnaires were distributed to 200 employees in the organization. This sampling technique was selected because the list of registered employees was not given to the researchers for confidential reasons, and this condition did not allow the researchers to randomly choose participants in this study. From the survey questionnaire distributed, 123 usable questionnaires were returned to the researchers which yielded 61.5 percent response rate. The survey questionnaires were answered by participants based on their consent and on a voluntary basis and the total number of this survey allowed it to be analyzed using inferential statistics (Cresswell 1998; Sekaran & Bougie 2010).

#### DATA ANALYSIS

The SmartPLS 2.0 was employed to analyze the survey questionnaire data because it has the capability to deliver latent variable scores, avoid small sample size problems, estimate every complex models with many latent and manifest variables, hassle stringent assumptions about the distribution of variables and error terms, and handle both reflective and formative measurement models (Henseler et al. 2009; Ringle et al. 2009). The procedures of data analysis are: first, confirmatory factor analysis was used to assess the validity and reliability of instrument. Second, Pearson correlation analysis and descriptive statistics were employed to estimate the validity and reliability of constructs. Third, SmartPLS path model analysis was utilized to test the hypothesized model. The outcomes of this test will clearly show the significant relationship between the independent variable and the dependent variable if the value of t statistic larger than 1.96 (Henseler et al. 2009). The value of  $R^2$  is used as an indicator of the overall predictive strength of the model. The value of  $R^2$  are considered as follows; 0.19 (weak), 0.33 (moderate) and 0.67 (substantial) (Chin 1998; Henseler et al. 2009). In addition, a global fit measure is conducted to validate the adequacy of PLS path model globally based on Wetzels et al. (2009) global fit measure. If the results of testing hypothesized model exceed the cut-off value of 0.36 for large effect sizes of  $R^2$ , showing that it adequately support the PLS path model globally (Wetzels et al. 2009).

#### FINDINGS

##### SAMPLE PROFILE

Table 1 shows that majority of respondents were males (54.5 %), ages between 26 and 30 years old (43.9 %), married employees (83.7 %), SPM/MCE holders (65.9 %), hospital staff (60.2 %), and employees who worked from 6 to 10 years (35.0 %).



TABLE 1. Respondent characteristics (n = 123)

Respondent	Sub Profile	Percentage
Gender	Male	54.5
	Female	45.5
Age	<18	15.4
	26 – 30	43.9
	31 – 35	18.7
	>36	22.0
Marital status	Single	16.2
	Married	83.7
Education	Degree and above	21.1
	Diploma	1.6
	STPM/HSC	5.7
	SPM/MCE	65.9
	PMR/SRP/LCE	5.7
Position	Medical Officers	3.3
	Administration staff	10.6
	Allied health science	7.3
	Others	78.9
Work Group	Medical Officers	19.5
	Administration Staff	34.1
	Allied Health Science Staff	33.3
	Others	13.0
Division	Formation Center	1.6
	Allied Health Science Institute	34.1
	Hospital	33.3
	Non-hospital	13.0
Length of Service	< 5 years	21.1
	6 to 10 years	35.0
	11 to 15 years	13.8
	16 to 21 years	13.0
	> 22 years	17.1

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

VALIDITY AND RELIABILITY OF THE MEASUREMENT SCALE

The confirmatory factor analysis was conducted to determine the psychometric of survey questionnaire data. Table 2 shows the results of convergent and discriminant validity analyses. All constructs had the values of AVE

larger than 0.5, indicating that they met the acceptable standard of convergent validity (Fornell & Larcker 1981; Henseler et al. 2009). Besides that, all constructs had the values of  $\sqrt{AVE}$  in diagonal were greater than the squared correlation with other constructs in off diagonal, showing that all constructs met the acceptable standard of discriminant validity (Henseler et al. 2009; Yang 2009).

Table 3 shows the factor loadings and cross loadings for different constructs. The correlation between items and factors had higher loadings than other items in the different constructs, as well as the loadings of variables were greater than 0.7 in their own constructs in the model are considered adequate (Henseler et al. 2009). In sum, the validity of measurement model met the criteria.

Table 4 shows the results of reliability analysis for the instrument. The values of composite reliability and Cronbach’s Alpha were greater than 0.8, indicating that the instrument used in this study had high internal consistency (Henseler et al. 2009; Nunally & Bernstein 1994).

ANALYSIS OF THE CONSTRUCTS

Table 5 shows the results of Pearson Correlation analysis and descriptive statistic. The means for the variables are from 5.8 to 6.1 signifying that the levels of communication, delivery, training motivation and training transfer ranging from high (4) to highest level (7). The correlation coefficients for the relationship between the independent variable (i.e., communication and delivery) and the dependent variable (i.e., training transfer) and the relationship between the mediating variable (i.e., training motivation) and the dependent variable (i.e., training transfer) were less than 0.90, indicating the data were not affected by serious collinearity problem (Hair et al. 2006). These results further confirm that the instrument used in this study meet the acceptable standards of validity and reliability analyses.

OUTCOMES OF TESTING HYPOTHESES 1 AND 2

Figure 2 presents the outcomes of testing a direct effect model using SmartPLS. It showed that the inclusion of communication and delivery in the analysis had explained 39 percent of the variance in dependent variable. Specifically, the result of testing this model displayed two important findings: first, communication significantly correlated with training motivation ( $\beta = 0.18$ ;  $t = 2.06$ ), therefore  $H_1$  was supported. Second, delivery

TABLE 2. The results of convergent and discriminant validity analysis

Variable	AVE	Communication	Delivery	Training Motivation	Training Transfer
Communication	0.877	0.936			
Delivery	0.837	0.601	0.915		
Training Motivation	0.798	0.467	0.608	0.894	
Training Transfer	0.801	0.254	0.398	0.687	0.895

TABLE 3. The results of factor loadings and cross loadings for different constructs

Construct/ Item	Communication	Delivery	Training Motivation	Training Transfer
<b>Communication</b>				
Openly delivering the information about training programs motivate me to:				
Increase my knowledge	0.934243	0.564314	0.406889	0.206581
Upgrade my skills	0.981755	0.592768	0.459662	0.237662
Strengthen my practice				
Good moral values	0.913389	0.613309	0.446221	0.251855
Enhance my thinking skills	0.914540	0.472823	0.461330	0.266345
<b>Delivery</b>				
Group discussion motivates me to learn proper techniques in solving group problems.	0.581877	0.944610	0.528849	0.330731
Lecture is important to increase my knowledge	0.483175	0.914394	0.581186	0.397590
Case studies are useful to improve my competency in providing services	0.582038	0.884749	0.540145	0.373111
<b>Training Motivation</b>				
I give full concentration in learning new skills	0.433743	0.561293	0.867349	0.631701
I put greater effort to learn thinking skills	0.440943	0.586969	0.867901	0.565880
I feel an obligation to attend all scheduled activities	0.390341	0.498277	0.925964	0.650792
I feel an obligation to perform course assignments	0.431251	0.506003	0.911506	0.646842
<b>Training Transfer</b>				
Knowledge that I have learned can aid me to increase my expertise	0.343451	0.461958	0.653266	0.905594
Skills that I have learned can help me to increase my competency in doing job	0.256337	0.376656	0.628752	0.878248
Thinking skills that I have learned can assist me to make decisions about my tasks	0.087532	0.144420	0.558580	0.898134
Good moral values that I have learned can support me to improve my personality	0.216247	0.427500	0.650758	0.896745

TABLE 4. Composite reliability and Cronbach's Alpha

Construct	Composite Reliability	Cronbach Alpha
Communication	0.966	0.953
Delivery	0.939	0.902
Training Motivation	0.941	0.916
Training Transfer	0.941	0.917

significantly correlated with training motivation ( $\beta = 0.50$ ;  $t = 5.87$ ), therefore  $H_2$  was supported. In sum, the result demonstrates that training administration does act

as an important predictor of training motivation in the hypothesized model.

#### OUTCOMES OF TESTING HYPOTHESES 3 AND 4

Figure 3 presents the outcomes of testing a mediating model using SmartPLS. It showed that the inclusion of communication, delivery and training motivation in the analysis had explained 49 percent of the variance in dependent variable. Specifically, the result of testing research hypothesis revealed that relationship between training administration (i.e., communication and delivery) and training motivation positively and significantly

TABLE 5. Pearson correlation analysis and descriptive statistics

Variable	Mean	Standard Deviation	Pearson Correlation analysis (r)			
			1	2	3	4
Communication	5.8	.99	1			
Delivery	6.0	.71	.61**	1		
Training Motivation	6.1	.69	.47**	.59**	1	
Training Transfer	5.9	.67	.25**	.39**	.70**	1

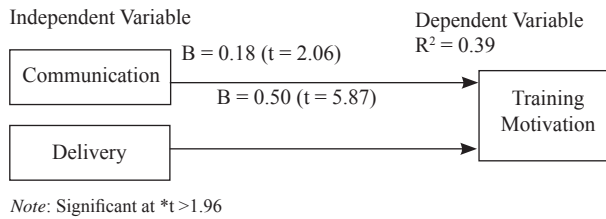


FIGURE 2. The outcomes of SmartPLS Path Model showing the relationship between training administration and training motivation

correlated with training transfer ( $\beta = 0.70$ ;  $t = 13.64$ ), therefore H<sub>3</sub> and H<sub>4</sub> were supported. The finding confirms that the relationship between communication and training transfer is mediated by training motivation. Similarly, the result also confirms that the relationship between delivery and training transfer is mediated by training motivation. Thus, the current findings validated the hypothesized model i.e., training motivation has positive impact on both of the relationship between communication and training transfer as well as the relationship between delivery and training transfer.

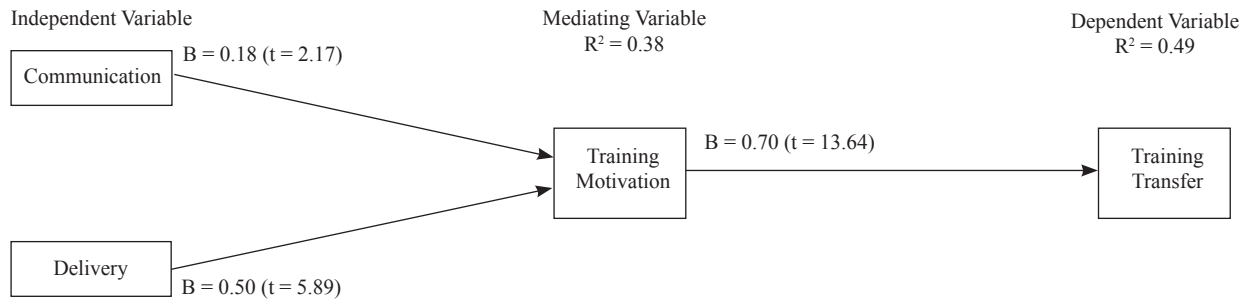


FIGURE 3. The outcomes of SmartPLS Path Model showing the relationship between training administration, training motivation and training transfer

In order to determine a global fit PLS path model, we carried out a global fit measure (GoF) based on Wetzels et al. (2009) guideline as follows:  $GoF = \sqrt{\text{MEAN}(\text{Communality of Endogenous}) \times \text{MEAN}(R^2)}$  = 0.63, indicating that it exceeds the cut-off value of 0.36 for large effect sizes of R<sup>2</sup>. This result confirms that the PLS path model has better explaining power in comparison with the baseline values (GoF small = 0.1, GoF medium = 0.25, GoF large = 0.36). It is also provides adequate support to validate the PLS model globally (Wetzel et al. 2009).

DISCUSSIONS AND IMPLICATIONS

This study confirms that training motivation does act as an important mediating variable in the relationship between training administration and training transfer. In the context of this study, HR administrators have properly planned and implemented training programs based on the broad policies and procedures set up by the stakeholder. According to the interviewed participants, majority of the employees perceived that the administrators have actively implemented comfortable communication and properly selected delivery modes in training programs, hence employees have high motivation to attend and learn in training programs, and employees have high readiness to apply what they have learned when returning to their organizations. This situation explains that the ability of HR administrators to properly implement comfortable communication and select appropriate delivery modes will strongly motivate employees to attend and learn

in training programs. As a result, it may lead to higher training transfer in the workplace.

The impact of this study can be separated into three major aspects: theoretical contribution, the robustness of research methodology, and practical contribution. In terms of theoretical contribution, the findings of this study generally highlights two important outcomes: first, training motivation does act as a mediating variable in the relationship between communication and training transfer. Second, training motivation does act as a mediating variable in the relationship between delivery and training transfer. This result also has supported and broadened studies by Elias and Rahman (1994), Hana (2005), and Teven (2010).

With respect to the robustness of research methodology, the survey questionnaires used in this study have met the acceptable standards of validity and reliability analyses. This may lead to the production of accurate and reliable research findings. In regard with practical contribution, the findings of this study can be used as guidelines by practitioners to improve the administration of training programs in organizations. In order to meet this objective, the management needs to consider the following aspects. Firstly, the training content and methods need to be updated according to the current job challenges in order to enhance the capability of employees in accomplishing their organizational key performance indicators. Secondly, recruitment policies need to give strong emphasis on selecting employees who have high academic qualifications in human resource development, good track records in training management,

and good personalities to fulfil important positions in HR departments. Thirdly, training facilities and technologies need to be looking forward in order to expose and upgrade current employee skills in training programs. If these suggestions are given fair attentions, this may motivate employees to support the organizational training programs which ultimately lead to effective and successful training program implementation.

#### CONCLUSION

This study proposed a conceptual framework based on the training administration research literature. The measurement scale used in this study met the acceptable standards of validity and reliability analyses. The outcomes of SmartPLS path model revealed that the relationship between training administration (i.e., communication and delivery) and training motivation has been a major predictor of training transfer in the organizational sample. Therefore, current research and practice within the workplace training program need to consider training motivation as a crucial factor of the training administration domain. This study further suggests that the ability of administrators to properly implement comfortable communication and select the right delivery modes will strongly motivate employees to attend and learn necessary knowledge, up to date skills, latest abilities and positive attitudes in training programs. As a result, it may lead to increased subsequent positive attitudinal and behavioural outcomes (e.g., job performance, service quality, organizational key performance indicators, and organizational competitiveness). Thus, these positive outcomes may directly help the employees to maintain and support the organization and human resource management's strategy and goals in a global economy.

#### LIMITATIONS AND FUTURE RESEARCH

The conclusions of this study are subjected to some limitations on the study area. First, by virtue of a cross-sectional research design, this study may not capture causal connections between variables of interest. Second, this study does not specify the relationship between specific indicators for the independent variable, mediating variable and dependent variable. Third, the outcomes of SmartPLS path model have only focused on the level of performance variation explained by the regression equations, but there are still a number of unexplained factors that influence the causal relationship among variables and their relative explanatory power. Finally, the sample for this study was taken from a military-based health organization that allowed the researchers to gather data via survey questionnaires. These limitations may decrease the ability to generalize the results of this study to other types of organizations.

The conceptual and methodological limitations of this study should be considered when designing future

research. First, several organizational and personal characteristics should be further explored, where this may show meaningful perspectives for understanding how individual similarities and differences influence the administration of training programs within an organization. Second, other research designs (e.g., longitudinal studies) should be employed to collect data and describe the patterns of change and the direction and magnitude of causal relationships amongst variables of interest. Third, to fully understand the effect of training administration on individual attitudes and behaviors via its impact upon training motivation, more organizations need to be used in future research. Fourth, other specific theoretical constructs of training motivation, such as competitiveness motive, self-efficacy, motivation to transfer, and perceive value need to be considered because they have widely been acknowledged as an important link between training administration and many aspects of personal outcomes (Gegenfurtner et al. 2009; Hoi Yan & Alex 2012; Khalil 2012; McCracken et al. 2012). Fifth, response bias and common-method variance are common issues in all questionnaire-based research. In order to decrease bias, the use of a larger sampling pool may represent the studied population. Finally, other elements of training administration such as training assignment and training participation need to be given attention because their roles are often discussed in many training administration research literature (Brown & McCracken 2009; Khalil 2012; McCracken et al. 2012; Vodde 2012). The significance of these issues needs to be further elaborated in future research.

#### REFERENCES

- Aziz, S. F. A. & Ahmad, S. 2011. Stimulating training motivation using the right training characteristic. *Industrial and Commercial Training* 43(1): 53-61.
- Azman, I., Lucy, L.C.S., Mohd Na'eim, A., Noor Faizah, D. & Ali, B. 2009a. Relationship between supervisor's role and job performance in the workplace training program. *Scientific Annals of the Alexandru Ioan Cuza University of Iasi: Economic Sciences Series LVI*: 237-250.
- Azman, I., Sofiah, B., Sheela Chitra, C.S., Rodney, G. & Rabaah, T. 2009b. Supervisor communication in training program: An empirical study in Malaysia. *Marketing & Management Journal* 7(1): 59-68.
- Azman, I. & Nurul, I. 2010. Motivasi latihan sebagai pembolehubah penghubung antara program latihan dan keberkesanan latihan. *Jurnal Kemusiaan* 16: 83-98.
- Azman, I., Hasan, A,B,M., Ahmad, Z.S. & Suriawati, S. 2010. Supervisor's role as an antecedent of training transfer and motivation to learn in training programs. *Acta Universitatis Danubius* 2: 18-38.
- Azman, I., Nurul Afiqah, F., Muhammad Madi, A. & Mohammad Nurul Huda, M. 2013. A study of the correlation between training administration and training motivation. *Management & Marketing Challenges for the Knowledge Society* 8(1): 95-108.
- Baldwin, T.T. & Ford, J.K. 1988. Transfer of training: A review and directions for future research. *Personnel Psychology* 41: 63-104.



- Bell, B.S. & Ford, J.K. 2007. Reactions to skill assessment: The forgotten factor in explaining motivation to learn. *Human Resource Development Quarterly* 18(1): 33-62.
- Bhawani, S.S. 2008. Transfer of training: Improving the effectiveness of employee training in Nepal. *Journal of Education and Research* 1(1): 51-61.
- Blanchard, P.N. & Thacker, J.W. 2004. *Effective Training: Systems, Strategies, and Practices*. New Jersey: Prentice Hall.
- Brown, T.C. & McCracken, M. 2009. Building a bridge of understanding: How barriers to training participation become barriers to training transfer. *Journal of European Industrial Training* 33(6): 492-512.
- Chaloner, B. 2006. An evaluative study on building the bridge between the training room and the workplace. *Educational Research and Evaluation* 19(1): 21-37.
- Chin, W.W. 1998. The Partial least squares approach to structural equation modeling. In *Statistical Strategies for Small Sample Research*, edited by R.H. Hoyle, 307-341. Thousand Oaks – California: Sage Publication, Inc.
- Cresswell, J.W. 1998. *Educational Research: Planning, Conduct, and Evaluating Quantitative and Qualitative Research*. 4th edition. Boston: Pearson.
- DeSimone, R.L., Werner, J.M. & Harris, D.M. 2002. *Human Resource Development*. USA: Thompson Learning, Inc.
- Elias, H. & Rahman, W. R. 1994. Achievement motivation training for university students: Effects on effective and cognitive achievement motivation. *Pertanika Journal of Social Sciences & Humanities* 2(2): 115-121.
- Fornell, C. & Larcker, D.F. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* XVIII: 39-50.
- Gegenfurtner, A., Veermans, K., Festner, D. & Gruber, H. 2009. Motivation to transfer training: An integrative literature review. *Human Resource Development Review* 8(3): 403-423.
- Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. 2006. *Multivariate Data Analysis*. New Jersey: Prentice Hall.
- Hall, B. 2005. How to select the right authoring tool. *Training* 42(5): 46-61.
- Hana, M.K. 2005. Assessing the roles and training needs of educational superintendents in Palestine. *Journal of Educational Administration* 43(2): 154-169.
- Henseler, J., Ringle, C.M. & Sinkovics, R.R. 2009. The use of the partial least squares path modeling in international marketing. *New Challenges to International Marketing Advances in International Marketing* 20: 277-319.
- Hoi Yan, C. & Alex, W.H.C. 2012. Increasing the competitive positions of countries through employee training: The competitiveness motive across 33 countries. *Industrial Journal of Manpower* 33(2): 144-158.
- Inman, A.G. 2006. Supervisor multicultural competence and its relation to supervisory process and outcome. *Journal of Marital and Family Therapy* 32(1): 73-85.
- Spector, J.M., Agrawal, P., Kodkany, B., Lipsitz, S., Lashoher, A., Dziekan G, Rajiv Bahl, Merialdi, M., Mathai, M., Lemer, C. & Gawande, A. 2012. Improving quality of care for maternal and newborn health: Prospective pilot study of the WHO safe childbirth checklist program. *PLoS ONE* 7(5).
- Khalil, M.D. 2012. Professional training as a strategy for staffdevelopment: A study in training transfer in the Lebanese context. *European Journal of Training and Development* 36(2/3): 156-178.
- Klein, H.J., Noe, R.A. & Wang, C. 2006. Motivation to learn and course outcomes: The impact of delivery mode, learning goal orientation, and perceive barriers and enablers. *Personnel Psychology* 59(3): 665-702.
- Locke, E.A., & Latham, G.P. 1990. *A Theory of Goal Setting and Task Performance*, Englewood Cliffs, New Jersey: Prentice-Hall.
- Machin, M.A. & Fogarty, G.J. 2004. Assessing the antecedents of transfer intentions in a training context. *International Journal of Training and Development* 8 (3): 222-236.
- Machin, M.A. & Treloar, C. 2004. Predictors of motivation to learn when training is mandatory. *Proceeding of the 39<sup>th</sup> APS Annual Conference*, edited by M. Katsikitis.. Melbourne, Victoria, Australia, 157-161.
- Maier, N.R. 1973. *Psychology in Industrial Organizations*. 4th edition. Oxford: Houghton Mifflin.
- McCracken, M., Brown, T.C. & O’Kane, P. 2012. Swimming against the current: Understanding how a positive organisational training climate can enhance training participation and transfer in the public sector. *International Journal of Public Sector Management* 25(4): 301-316.
- Mohamad, S. 2006. The relationship among trainees characteristics, training design and work environment with training transfer. *Jurnal Kemanusiaan* 7: 23-32.
- Noe, R.A. 2010. *Employee Training and Development*. Singapore: McGraw-Hills Education.
- Noe, R.A. 1986. Trainees’ attributes: Neglected influences on training effectiveness. *Academy of Management Review* 11: 736-749.
- Noe, R.A., Hollenbeck, J.H., Gerhartm, B. & Wright, P. M. 2009. *Fundamentals of Human Resource Management*. New York: McGraw-Hill International Edition.
- Nunally, J.C. & Bernstein, I.H. 1994. *Psychometric Theory*. New York: McGraw-Hill.
- Ringle, C.M., Wende, S. & Will, A. 2009. SmartPLS 2.0 M3. Hamburg. Available at <http://www.smartpls.de>.
- Rodrigues, C.M. & Gregory, S. 2005. Qualitative study of transfer of training of student employees in a service industry. *Journal of Hospitality and Tourism Research* 29(1): 42-66.
- Rowold, J. 2007. The impact of personality on training-related aspects of motivation: Test of a longitudinal model. *Human Resource Development Quarterly* 18(1): 9-31.
- Saks, A.M. & Belcourt, M. 2006. An investigation of training activities and transfer of training in organizations. *Human Resource Management* 45(4): 629-648.
- Sekaran, U. & Bougie, R. 2010. *Research Methods for Business: A Skill Building Approach*. New York: John Wiley & Sons, Inc.
- Tai, W.T. 2006. Effects of training framing, general self-efficacy and training motivation on trainee’s training effectiveness. *Personal Review* 35(1): 51-65.
- Teven, J.J. 2010. The Effects of supervisor nonverbal immediacy and power use on employees’ ratings of credibility and affect for the supervisor. *Human Communication* 13: 69-85.
- Tsai, W.C. & Tai, W.T. 2003. Perceived importance as a mediator of the relationship between training assignment and training motivation. *Personnel Review* 32(2): 151-163.
- Vodde, R.F. 2012. Changing paradigms in police training: Transitioning from a traditional to an andragogical model. *Police Organization and Training*: 27-44.

- Vroom, V.H. 1964. *Work and Motivation*. New York: John Wiley & Sons.
- Weissbein, D.A., Huang, J. L., Ford, J.K. & Schmidt, A. M. 2011. Influencing learning states to enhance trainee motivation and improve training transfer. *Journal of Business and Psychology* 26(4): 423-435.
- Wetzels, M., Odekerken-Schroder, G. & Van Oppen, C. 2009. Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly* 33(1): 177-195.
- Yang, Z. 2009. A study of corporate reputation's influence on customer loyalty based on PLS-SEM model. *International Business Research* 2(3): 28-35.

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