



ZULFAQAR Journal of Defence Management, Social Science & Humanities

Journal homepage: <https://zulfaqarjdmssh.upnm.edu.my/index.php/zjdmssh/about>



ASSESSING THE MEDIATING EFFECT OF TRAINING MOTIVATION BETWEEN TRAINING DESIGN AND JOB PERFORMANCE

Noor Azmi Mohd Zainol^{a,*}, Norlaila Mazura Hj. Mohaiyadin^b, Azman Ismail^c, Jessica Ong Hai Liaw^d

^{a,b,d}National Defence University of Malaysia, Kem Sungai Besi, 57000, Kuala Lumpur

^cUniversiti Kebangsaan Malaysia, 43600 Bangi, Selangor

*Corresponding author: noorazmi@upnm.edu.my

ARTICLE INFO

Article history:

Received

18-06-2020

Received in revised

02-03-2022

Accepted

01-04-2022

Available online

30-06-2022

Keywords:

Infantry Corps, job performance, Malaysian Army, training design, training motivation

e-ISSN: 2773-529X

Type: Article

ABSTRACT

Reviews on the training management literature have emphasised that the training design consists of three essential elements: (1) training content; (2) instructors' roles; and (3) superiors' support, which may lead to a high impact on job performance of employees. However, a thorough investigation showed that the relationship between those elements was mediated by training motivation. Therefore, this study aims to confirm the effect of training motivation in military organisations. The measurement was using 412 samples in the Malaysian Army Infantry Corps. Testing the hypotheses using SmartPLS version 3.2.5 revealed these exciting findings: training motivation does act as an important mediating variable between course content, instructors' roles and superior support in the relationship with job performance in organisational samples. Further, the discussion, implications and conclusion are elaborated.

© Noor Azmi Mohd Zainol 2022. All rights reserved.

DOI: <https://doi.org/10.58247/jdmssh-2022-0501-02>

Introduction

The training programme is a vital tool to support employees to bridge the gap between their current performance and their desired level of performance. The challenge for the organisations is to design the appropriate training that gives employees the knowledge, skills, and attitudes that affect their desired outcomes. Several research has been done to investigate these issues. Scholars suggest three prominent elements of the organisation's training programme: training content, instructor's role, and superior's support (Beier & Kanfer, 2010; Goldstein & Ford, 2002; Holladay et al., 2003; Noe, 2013). Extant research in this field highlights that the ability of management blended these elements may induce positive attitudinal and behavioural outcomes, especially job performance (Azman et al., 2011; Azman, 2012; Hatfield et al., 2011). Scholars in the training field like Brum (2007) and Robbins and Judge (2008) observed job performance as the individuals have high motivation to transfer knowledge, skills, abilities, and positive attitudes gained from training programmes to perform their job accordingly. A thorough review shows that training motivation influenced this relationship between the training programme and job performance (Azman et al. 2011; Mullen et al. 2006; Patrick et al. 2009). Training motivation is a willingness to follow, involve, and commit to learning activities during training to achieve specific goals (Blanchard & Thacker, 2007; Knowles, 1989; Klien et al., 2006; Noe, 2013). Most scholars are more focused on the conceptual debates about training programme features and the direct relationship between training

design elements but less on measuring the effect size of training motivation in organisations. To scrutinise this topic, researchers have conducted a study on a military establishment in Malaysia. The focus of this study is to measure the mediating effect of training motivation in the relationship between the training programmes and job performance. Hopefully, this study will support good providence to practitioners to make suitable strategies for improving the effectiveness of training programmes in organisations.

Literature Review

The relationship between training elements, training motivation and job performance is consistent with the motivation theory notion. Expectancy Theory (Vrooms', 1964 &1973) posits that individuals will act if they understand the value of outcomes. Besides that, Social Learning Theory (Wood & Bandura, 1989) states that the learning process may increase individuals' belief in their abilities to perform tasks. Application of these theories in various training models suggests the need to appropriately design explicit and relevant training content to improve further instructors' ability to teach and guide trainees to learn necessary knowledge, new skills, and positive attitudes. As a result, this may lead to the positive achievement of the organisation's goals (Azman et al., 2011; Mullen et al., 2006; Patrick et al., 2009).

Several recent studies investigated training design using different samples and confirmed the impact of training motivation on job performance in the training programmes. Studies abroad by Mullen et al. (2006) on 194 army personnel in the United States; Paul et al. (2009) on 883 samples representing the officer cadets in the US Military Academy; Patrick et al. (2009) on 1,149 military trainees in the United Kingdom; and Hatfield et al. (2011) on 21,000 leaders at various levels in the United States Army. In Malaysia, there are few studies by Azman (2012) on 250 samples consisting of members of the parachute troopers of the Malaysian Army; and Azman et al. (2016) in their study of 163 pieces of various levels of leaders in the Malaysian Army; and Noor Azmi et al. (2018) on 329 models from Royal Malay Regiment of Malaysian Army. Findings of these studies demonstrated the ability of the organisation to plan the training content correctly, the talented instructors to teach and guide trainees and the willingness of superiors to provide adequate support, which has powerfully invoked the trainees' training motivation in learning necessary knowledge, up-to-date skills, new abilities and positive attitudes. Consequently, it could also lead to increased employee job performance in organisations (Azman, 2012; Azman et al., 2016; Hatfield et al., 2011; Mullen et al., 2006; Noor Azmi et al., 2018; Patrick et al., 2009; Paul et al. 2009). This literature has been used to develop a theoretical framework, as shown in Fig. 1.

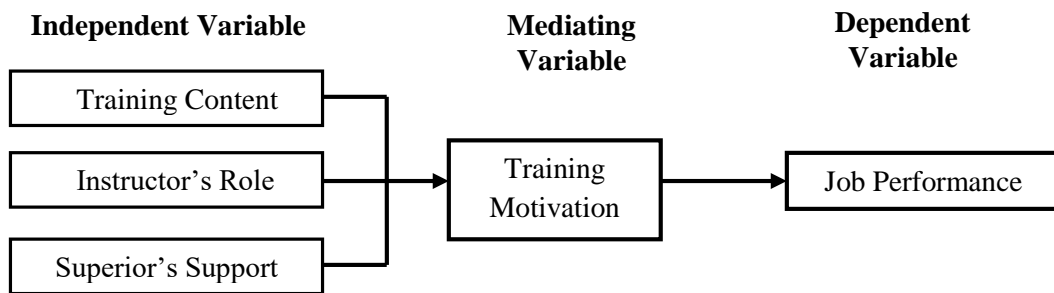


Fig. 1: Theoretical Framework

Based on the framework, it was hypothesised that:

- H1:** Relationship between training content and training motivation positively impact job performance.
- H2:** Relationship between the instructor's role and training motivation positively impact job performance.
- H3:** Relationship between superior's support and training motivation positively impact the job performance.

Methodology

A cross-sectional method was employed to allow the researchers to integrate the training literature, the pilot study, and the actual survey as the primary procedure to gather data for this study. The main advantage of using such methods is that they may decrease the inadequacy of a single process and increase the ability to collect accurate, less biased, and better-quality data (Creswell, 2012; Sekaran & Bougie, 2016).

The in-depth interviews involved ten experienced military leaders, namely, training staff officers, instructors, and commanders at company levels, platoon, and sections in the infantry battalions. They have good knowledge and experience in the design of company commander, platoon commander and section commander courses in the Malaysian Army Combat Training Centre (or PULADA). Information gathered through this interview method assisted the researchers in understanding the context of this study and developing the questionnaires. The survey questionnaire used a 7-point Likert scale. The training content, instructors' roles, training transfer and motivation items were modified from the training programme research literature (Azman, 2012; Azman et al., 2016). The targeted population consists of intermediate and junior leaders who have worked in various Malaysian Army infantry corps units. A convenience sampling technique was used to distribute self-administered questionnaires to 500 leaders who attended LDP at the PULADA camp. Out of the number, 412 usable questionnaires were returned to the researchers, yielding a response rate of 82.4%.

The research's statistical analysis was conducted using structural equation modelling generated by the SmartPLS version 3.2.5 (Ringle et al. 2005). The steps of analysing data are: (1) confirmatory factor analysis (CFA) will be conducted to ensure the reliability and validity (convergent and discriminant validity); and (2) the SmartPLS path model will be employed to test the hypothesised model by examining the path coefficients using standardised betas (β), t statistics (bootstrapping) and R^2 . The value of β ($t > 1.96$) shows a significant correlation between variables (Chin, 1998; Henseler et al., 2009). In addition, R^2 is used as an indicator of the overall predictive strength of the model. The values of R^2 are considered as follows; 0.19 (weak), 0.33 (moderate) and 0.67 (substantial) (Chin, 1998; Hair et al. 2017; Henseler et al. 2009).

To explain the mediating effect of training motivation, the mediation analysis procedure, as suggested by Hair et al. (2017), was employed. The system characterised two types of non-mediation; (1) **direct only non-mediation**: the direct effect is significant but not the indirect effect; and (2) **no effect non-mediation**: neither the direct nor the indirect effect are significant. While there are three types of mediation, namely: (1) **complementary mediation** (partial mediation): the indirect effect and the direct effect both are significant and point in the same direction; (2) **competitive mediation** (partial mediation): the indirect effect and the direct effect both are significant and point in the opposite direction; and (3) **indirect only mediation** (complete mediation): the indirect effect is significant but not the direct effect.

Findings

Table 1 shows the results of convergent, discriminant validity and reliability tests. All constructs had the values of cross loading and Average Variance Extracted (AVE) larger than 0.5 indicating all constructs met the acceptable standard of convergent validity (Barclay et al., 1995; Fornell & Larcker, 1981; Henseler et al., 2009). Besides, all constructs had the values of \sqrt{AVE} in diagonal were more significant 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). The factor loading greater than 0.7 and the Composite Reliability (CR) greater than 0.8 is considered adequate and meets the criteria of the reliability test (Chin, 1998; Fornell & Larcker, 1981; Gefen & Straub, 2005; Henseler et al., 2009). In sum, the validity and reliability of the measurement model met the criteria and fit for hypothesis testing.

Table 1: Summary of Result Item Reliability, Convergent and Discriminant Validity Test

	No. of Items	Factor Loading	CR	AVE	1	2	3	4	5
1. Training Content	9	0.773 – 0.840	0.946	0.659	0.812				
2. Instructor's Roles	8	0.818 – 0.839	0.944	0.679	0.748	0.824			
3. Superior Support	6	0.810 – 0.867	0.934	0.701	0.728	0.781	0.837		
4. Training Motivation	11	0.820 – 0.885	0.968	0.731	0.664	0.682	0.735	0.855	
5. Job Performance	8	0.816 – 0.881	0.954	0.720	0.751	0.759	0.823	0.755	0.849

Note: \sqrt{AVE} shows in diagonal

Fig. 2 presented the outcomes of structural model testing using SmartPLS. Specifically, the results revealed that training content, instructor's roles, superior's support, and mediate by training motivation were significantly related to job performance ($\beta=0.755$; $t=20.250$); therefore, H2 and H3 were supported. The value of R^2 is used as an indicator of the overall predictive strength of the model. This figure presents that the insertion of training content, instructor's roles, superior's support and training motivation in the analysis had explained 57 per cent (moderate) of the independent variance variable. This result confirms that training motivation has mediated the effect of a training programme on job performance in the studied organisation.

Table 2: Summary Outcomes of Hypothesis Testing

	β	t	p	R^2
Training Content → Training Motivation	0.203	2.163	0.031	0.586
Instructor's Roles → Training Motivation	0.184	2.239	0.026	
Superior Support → Training Motivation	0.443	5.646	0.000	
Training Motivation → Job Performance	0.755	20.250	0.000	0.570

Note: Significant at * $t > 1.96$; ** $t > 2.58$; *** $t > 3.29$

The findings of this study confirm that training motivation does act as an essential mediating variable in the association between the training programme and job performance. Therefore, it's supported by the motivation theory and also studies by Mullen et al. (2006), Patrick et al. (2009), Paul et al. (2009), Hatfield et al. (2011), Azman (2012), Azman et al. (2016), and Noor Azmi et al. (2018). The outcome also contributed to the robustness of the research methodology, while the instrument used in this study has met the level of validity and reliability analyses. This may lead to producing accurate and reliable research findings.

Regarding contributions to the practitioner, the findings of this study may be used to improve the effectiveness of training programmes. Firstly, the possible improvement efforts are customising training contents according to organisational expectations and needs. The training contents need to be reviewed according to the current situation. The relevant and up-to-date training content will motivate trainees to learn necessary knowledge, upgrade skills and perform positive attitudes. Secondly, the selection of instructor criteria must be followed strictly. This is to ensure the only qualified person with the appropriate working experience, capable of delivering training content, guiding the trainees, and doing the administrative functions will be selected as an instructor. The person can also develop the training plan and supervise the training programmes. The instructor needs to motivate the trainees to perform well during the training session and increase their performance in the units after the training/course.

Finally, the involvement of immediate superior while selecting the personnel to attend course/training programme. This is to ensure only the person chosen will attend the course by conducting, i.e. pre-course or interview in their organisation. Oncompleting staff will attend the course/training programme by completing this. They will return to the organisation with the new knowledge, skills, and attitudes, then apply them to implement daily work tasks. Consequently, management's ability to facilitate these recommendations may maintain the organisation's human resource development strategies and goals. It encourages employees to appreciate and accept the organisational training programme's policies, procedures, and objectives.

Conclusion

This study tested a theoretical framework based on the considerable training programme research literature. The instrument used in this study met the acceptable validity and reliability analysis standards. The outcomes of the SmartPLS path analysis revealed that the association between training assignment methods and training motivation had enhanced the training programme. Therefore, all hypotheses were supported. This result also has supported and extended training assignment research literature. Therefore, current research and practice within human capital development and management must incorporate training motivation as a critical dimension of the training assignment domain. This study further suggests that the capability of administrators to design the training programme appropriately will enhance positive subsequent attitudinal and behavioural outcomes (e.g., proactive behaviour, career success and commitment). Thus, these positive outcomes may maintain and improve organisational competitiveness in a global era.

References

- Azman, M.Z. (2012). *Factors affecting the effectiveness of training transfer in the parachute infantry battalion*. Masters Project Report (Unpublished). The University of Malaya.
- Azman, I., Fazilatulaili, A., Afiqah, S.N.F. & Hua, N.K. (April 2011). Supervisor's role in training programmes and their relationship with training transfer. Proceeding of International Management Conference (IMaC2011), 16th – 17th April 2011, Taman Tamadun Islam, Kuala Terengganu, Terengganu.
- Azman, I., Noor Azmi, M.Z. & Nursaadatun Nisak, A. (2016). *Programme pembangunan Kepimpinan Meningkatkan Pemindahan Latihan dalam Tentera Darat Malaysia: Kajian Empirikal*. *Jurnal Pengurusan*, 46: 149-161.
- Barclay, D., Higgins, C. & Thompson, R. (1995). The Partial Least Squares (PLS) approach to causal modelling: Personal computer adoption and use as an illustration. *Technology Study*, 2 (2), 285-309.
- Beier, M.E. & Kanfer, R. (2010). Motivation in training and development: A phase perspective. In S.W.J. Kozlowski and E. Salas (Eds.), *Learning, training and result in an organisation* (pp. 65-98). New York: Routledge.
- Blanchard, P.N. & Thacker, J.W. (2003). *Practical training: System, strategies and practices* (2nd Ed.). Boston: Pearson Education International.
- Brum, S. (2007). What impact does training have on employee commitment and employee turnover? Schmid Labor Research Center Seminar Research Series, 1-13.
- Chin, W.W. (1998). The Partial Least Squares approach to Structural Equation Modelling, Dalam Hoyle, R.H. (peny) *Statistical strategies for small sample research*. California: Sage Publication, Inc., 307-341.
- Creswell, J.W. (2012). *Educational research: Planning, conduct, and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson.
- Fornell, C. & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39-50.
- Gefen, D. & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communication of the Association for Information Systems*, 16, 91 – 109.
- Goldstein, I.L. & Ford, J.K. (2002). *Training in organisations*. Wadsworth: Thompson Learning.
- Hair, J.F., Hult, G.T., Ringle, C.M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modelling (PLS-SEM)* (2nd Eds.). Sage Publication, Inc., Thousand Oaks, CA.
- Hatfield, J., Steele, J.P., Riley, R., Glaze, H.K. & Fallesen, J. J. (2011). 2010 Center for Army Leadership Annual Survey of Army Leadership (CASAL): Army Education. Technical Report 2011-2. Fort Leavenworth: The Center for Army Leadership.
- Henseler, J., Ringle, C.M. & Sinkovics, R.R. (2009). The use of the partial least squares path modelling in international marketing. *New Challenges to International Marketing Advances in International Marketing*, 20, 277-319.
- Holladay, C. L., Knight, J. L., Paige, D. L. & Quinones, M. A. (2003). The influence of framing on attitudes toward diversity training. *Human Resource Development Quarterly*, 14(3), 245-263.
- Klien, H.J., Noe, R.A. & Wang, C. (2006). Motivation to learn and course outcomes: the impact of delivery mode, learning goal orientation, and perceived barriers and enablers. *Personnel Psychology*, 59, 665 – 702.
- Knowles, M. (1984). *Andragogy in action*. San Francisco: Jessey-Bass Publishers.
- Mullen, T. R., Kroustalis, C., Meade, A. W., & Surface, E. A. (2006). *Assessing Change in Perceived Organizational Support Due to Training*. The 21st Annual Conference of the Society for Industrial and Organizational Psychology, Dallas, TX.
- Noe, R.A. (2013). *Employee training and development* (6th ed.). Illinois: McGraw-Hill Irwin.
- Noor Azmi, M. Z., Fazli, A. H., Ahmad Azan, R., Zahimi, Z. A. & Daud, M. S. (2018). Numerical Assessment on Training Motivation, Syllabus and Instructor's Roles in Military Training Programme Using PLS. *Advanced Science Letter (Adv. Sci. Lett.)*, 24(3), 1938-1941.

- Patrick, J., Scrase, G., Ahmed, A. & Tombs, M. (2009). Effectiveness of instructor behaviours and their relationship to leadership. *Journal of Occupational and Organizational Psychology*, 82, 491–509.
- Ringle, C. M., Wende, S. & Will, A. (2005). SmartPLS 2.0 M3, Available at HTTP:// www.smartpls.de.
- Robbins, S.P. & Judge, T.A. (2008). *Essentials of Organizational Behavior* (9th Ed.). NJ: Pearson Prentice Hall.
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill-Building Approach*, 7th Edition. New York: John Wiley & Sons, Inc.
- Vroom, V.H. (1964). *Work and motivation*. New York: John Wiley & Sons.
- Vroom, V.H. (1973). A new look at managerial decision making. *Organizational Dynamics*, 1(4), 66-80.
- Wood, R. & Bandura, A. (1989). Social cognitive theory of organisational management. *Academy of Management Review*, 14, 361-384.