The Influence of Training and Training Transfer Factors on the Performance of Higher Education Employees

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Abstract: Prominent studies have suggested that employee Training Transfer and job performance can be enhanced by supervisor support, Work Environment and Motivation to share knowledge. In the context of Palestine, past studies had indicated conflicting findings with regards to the effect of the abovementioned training factors in improving Training Transfer and job performance. Hence, this current paper attempts to examine the effect of the abovementioned training factors on job performance as mediated by Training Transfer. Employee training and development is one of the major challenges faced by developing countries which is a critical issue as employees are considered as crucial organizational assets. This quantitative assessment used a sample of 328 academic employees from various universities in Palestine. The findings demonstrated that Training Transfer positively mediates the relationship between Work Environment and job performance. However, it has an insignificant mediating effect in the relationship between supervisor support and job performance as well as in the relationship between Sharing Knowledge Motivation and job performance.

Keywords: Supervisor Support, Work Environment, Sharing Knowledge Motivation, Training Transfer, Job performance.

Introduction

Organizations invest heavily on employee training and development as a measure to counter the harsh competition in the global business arena. The corporate sector is also driven by advanced technological innovations in enabling employees to take proper control over the elements in order to sustain their competitiveness and prevent poor performance.

The decision taken by organizations worldwide to invest billions on employee training and development is also driven by numerous empirical studies and business reports that have indicated a significant correlation between employee training and job performance (Yamnill, 2001). However, the reports also indicated that only a small percentage of the organizations had successfully gained positive results from the measure. In fact, only a few individuals actually implement the knowledge at their workplace. Sookhai and Budworth (2010) highlighted that approximately 66 to 90 percent of skills imparted during training are lost due to improper Training Transfer s.

It has also been reported that only a mere 21 percent of organizations assess Training Transfer and the degree of its implementation in the workforce (Lim & Nowell, 2014). Workplace application of training lessons is actually very minimal (Mohammad, Turab & Casimir, 2015).

Due to the large investments made, the organisations are also at risk of incurring major losses if their employees fail to implement the learned skills at the workplace. This paper hence attempts to identify the factors causing the Training Transfer failure and how the post-training factors can facilitate Training Transfer and job performance.

Baldwin et al. (1991) highlighted that Training Transfer is significantly influenced by abovementioned training activities. The influence of perception and importance of training and transfer can be fostered by managerial interventions. This paper examines how post-training initiatives like supervisory support and perceived utility influence Training Transfer and job performance in the context of higher education institutions in Palestine.

Literature Review

Job Performance

This entails the behaviours and the results of employees being involved in tasks that are pertinent to the attainment of goals set towards achieving organizational success. Many studies have indicated the significance of training in enhancing productivity and organisational performance (Duman & Hanchane, 2010; Sahinidis & Bouris, 2008; Mohammad, Turab & Casimir, 2015). Other positive outcomes of training and learning are job efficiency, skill upgrades, and performance improvement, amongst others (Nikandrou, Brinia & Bereri, 2009).

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Training Transfer

This entails the degree to which learning, skills and knowledge attained from training can be replicated and applied at the workplace (Brinkerhoff & Apking, 2001; Blume, Ford, Baldwin & Huang, 2010). Training Transfer occurs when the training content can be generalised and implemented at the workplace (Blume et al., 2010; Baldwin & Ford, 1988; Wexley & Latham, 1981; Brinkerhoff & Apking, 2001).

Training Transfer Factors

Supervisor Support

The extent to which the individual trainee's supervisor assists him/her in setting performance goals, providing chances and space in the organization for him/her to employ newly gained skills, and recognizing and rewarding that individual for applying those skills and knowledge on the job (Short, 1997). The work environment has an impact on training transfer and plays a significant role in training transfer (Rouiller & Goldstein, 1993).

A training program may have been implemented with an exceptional design and delivery method, but in the absence of an adequate environment that supports trained tasks, the training program may be deemed to have low value or consequence. (Grossman & Salas, 2011).

Work Environment

The work environment has an impact on training transfer and plays a significant role in training transfer (Rouiller & Goldstein, 1993). A training program may be implemented with an exceptional design and delivery method, but if an adequate environment that supports trained tasks is not available, the training program may be viewed to have limited value or outcome (Grossman & Salas, 2011).

Knowledge Sharing Motivation

Organizations are interested in employees who can implement their training knowledge at the workplace (Brinkerhoff & Montesino, 1995). Training is motivated by the behavior's power, determination and guidance focusing on the learning taking place in the training venue (Colquitt et al., 2000). It determines the amount of time spent on learning (Bransford, Brown & Cocking; 2000).

According to Knowles et al. (2005), by matching the elements in training, a solid understanding is developed indicating the trainee's motivation and the significance of the new knowledge for their career. Knowledge transfer is driven by both extrinsic and intrinsic motivations that are attached to the training outcomes (Burke & Hutchins, 2007).

Theoretical Framework and Hypotheses

Transfer studies mostly rely on the transfer model introduced by Baldwin and Ford (1988) and the theoretical model developed by Holton (1996) and Holton, Bates and Ruona (2000) (Lim & Morris, 2006). Baldwin and Ford (1988) affirmed that numerous variables can inhibit Training Transfer (Kontoghiorghes, 2004). This is indicated as the "transfer problem" by Michalak (as cited in Baldwin & Ford, 1988, p. 63). According to Baldwin and Ford (1988), Training Transfer can only occur with the presence of job-specific learned behaviour that is maintained over time.

The Training Transfer framework developed by Baldwin and Ford (1988) suggested three factors i.e. characteristics of trainee (individual factors), work environment (environmental factors) and training design (situational factors). The existing body of knowledge on Training Transfer does not really help practitioners in maximizing effective transfers. There are very few empirical studies on the effects of individual factors such as trainee ability, personality and motivation on Training Transfer.

Susan and Uma (2012) postulated that training is affected by trainee characteristics, transfer intention, reactions, delivery mechanisms, work environment as well as situational and organizational factors. This paper examines the mediating effect of Training Transfer in the correlation between abovementioned training factors (i.e., supervisor support, Work Environment and sharing knowledge motivation) and job performance. The adapted model is presented in Figure 1.

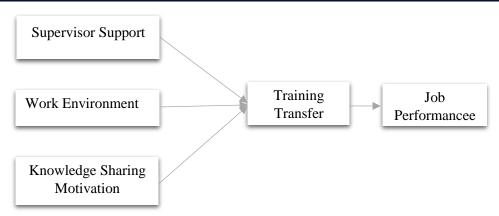


Figure 1: Research Model

The relationship between supervisor support and job performance mediated by training transfer.

Cromwell and Kolb (2004) discovered that trainees who received high levels of supervisor help transferred greater knowledge and abilities just one year after participating in a training program than those who reported low levels of support. Other studies have stressed the need of supervisor involvement or participation in training for transfer effects (Gilpin-Jackson & Bushe, 2007; Saks & Belcourt, 2006). Supervisory support in the form of encouragement for the application of new skills was discovered by Kontoghiorghes (2001).

H1: There is a positive relationship between supervisor support and job performance when Training Transfer mediate the relationship.

The relationship between work environment and job performance mediated by training transfer.

Support has been widely explored in studies on the effect of the work environment on training transfer as a crucial category required for positive transfer (Huczynski and Lewis, 1990). The most constant factor explaining the association between the work environment and transfer is the help trainees receive to put their new skills and knowledge to use (Clarke, 2002). This study aims to draw conclusions from the discussion.

H2: There is a positive relationship between work environment and job performance when Training Transfer mediate the relationship.

The relationship between sharing knowledge motivation and job performance mediated by training transfer.

Training motivation is defined as the effort, power, and control that the trainees apply on the learning activities pre-, during, and post-training (Tannenbaum & Yukl 1992). The trainees' motivation to learn and undergo training influences their ability and readiness to secure, maintain and apply the learned knowledge at their workplace. Hence, the hypothesis below is proposed:

H3: Sharing knowledge motivation positively affects job performance as mediated by Training Transfer.

Method

The hypothesized relationships were tested using a quantitative approach. The study sample was 328 academic staff members in various Palestinian universities. The predictor variables and their effect on the outcome variable were tested using different scales. The Pearce and Porter (1986) scale was used to measure job performance whilst the Xiao (1996) scale was used to measure Training Transfer. The training components such as work environment, motivation and supervisor support were derived from Saks and Belcourt (2006). A 5-point Likert scale was employed to assess all the items whereby 1 = strongly disagree and 5 = strongly agree. Out of all the returned questionnaires, 300 were found usable for analysis.

Results and Discussion

A two-stage model building process was applied to determine the structural equation modeling (SEM) (Hair et al., 1998; Hoyle & Panter, 1995; Jöreskog & Sörbom, 1996). The first stage entails the application of the confirmatory factor analysis (CFA) for analyzing the data whilst the second stage involves the use of the structural equation models for analyzing the hypotheses. The CFA was employed to determine the variables' reliability and factor loadings so as to ensure alignment with the theoretical foundation.

A total of 29 items were used to measure the CFA for supervisor support, transfer climate, sharing knowldge motivation, Training Transfer and job performance. The items were tested for first-order constructs. All the items met the threshold value of 0.5 for the AVE as recommended by Nunnally and Bernstein (1994). Likewise, all the variables also met the threshold value of 0.6 for the composite reliability as suggested by Bagozzi and Yi (1988). The variables' Cronbach's Alpha values were also above the cut-off value of 0.7 as recommended by Nunnally and Bernstein (1994). Table 1 presents the complete CFA results.

Table 1: CFA for Study Variables

Variables	Reliability	AVE	CR
Supervisor Support	0.908	0.593	0.911
Work Environment	0.898	0.595	0.899
Sharing knowledge motivation			
Training Transfer	0.887	0.564	0.886
Job Performance	0.909	0.587	0.909

R² values of 0.68 and 0.42 were derived for Training Transfer and job performance, respectively. This means that 68 percent of the variations in Training Transfer are justified by its predictors i.e., supervisor support, Work Environment and sharing knowledge motivation. Generally, the findings show that both the R² values fulfill the threshold value of 0.30 (Quaddus & Hofmeyer, 2007).

The research structure was found to have sufficient data fit as indicated by the goodness-of-fit indices: $\chi 2 = 271.028$, df = 163, p=0.000, GFI = 0.926, AGFI = 0.885, CFI = 0.971, TLI = 0.959, IFI = 0.972, RMSEA = 0.047 and $\chi 2/df = 1.663$.

This present study aims to examine the relationship between the abovementioned training factors (i.e. supervisor support, Work Environment and sharing knowledge motivation) and job performance as mediated by Training Transfer. Two hypotheses were proposed to test the effects as presented in the previous section. The results show that supervisor support significantly affects job performance without the mediating effect of Training Transfer, deriving a standardized total effect of 0.24 and P-value of 0.03. Work Environment was found to have a significant direct effect on Training Transfer with a standard beta value of 0.29. Sharing knowledge motivation was also found to have a significant effect on Training Transfer with a standard beta value of 0.24.

With the incorporation of the mediating role of Training Transfer, Work Environment was found to have a significant effect on job performance; however, supervisor support and sharing knowledge motivation were found to have an insignificant effect. Hence, Hypothesis 2 is accepted indicating Work Environment as a crucial factor in the Training Transfer and in enhancing employee performance (0.13*).

Table 2: Direct and Indirect Effect of Study Variables

	TCL	MSK	KNS
Total Effect of IV on DV without M (path a)	0.00	0.18**	0.00
Direct Effect of IV on DV with M (path a')	0.05	0.10^{*}	-0.03
Indirect Effect of IV on DV through M (path bc)	0.04	0.05**	-0.03
Effect of IV on M (path b)	0.29	0.24	0.24
Effect of M on DV (path c)	0.54**	0.54**	0.54**
Mediation Effect	No	Yes	No
Degree of Mediation		Partial	

^{*}Contribution is significant at the 0.05 level (2-tailed); **. Contribution is significant at the 0.01 level (2-tailed).

Note: $WI=Work\ Environment,\ MSK=Motivation\ to\ share\ knowledge,\ SS=\ supervisor\ support,\ DV=\ job\ performance,\ M=\ Training\ Transfer$

Conclusion

Work Environment was found to have a significant effect in enhancing job performance. A conducive work environment provides employees with the proper opportunity to transfer their training knowledge to the workplace. Hence, the work climate is influential in ensuring positive Training Transfer.

Meanwhile, supervisor support was found to have no effect on job performance when mediated by Training Transfer. However, in its individual capacity, it is positively correlated with Training Transfer as indicated by Devos et al. (2007), Gilpin-Jackson and Busche (2006), Holton (2005) and Holton et al. (2000). Without the proper opportunity to apply learned knowledge and skills, the acquired learning will deteriorate thus complicating Training Transfer.

Sharing knowledge motivation significantly affects training, intention to implement and Training Transfer (Ford et al., 1992; Huczynski & Lewis, 1980). Likewise, with training adoption motivation (Cheng & Ho, 2001; Tziner, Risher, Senior & Weisberg, 2007; Cheng & Hampson, 2008; Blume et al., 2010), employees who can adopt and apply their learning the best will be the most sustainable ones throughout the year as indicated by Axtell, Maitlis and Yearta (1997).

Velada et al. (2007) found that the ability to apply and transfer training knowledge has an influence on job performance. The ability to perform is the extent to which the employee can improve whenever required and whenever the employee wants to (Holton, Bates & Ruona, 2000). In terms of training climate, training knowledge application is subjected to the surrounding condition (Lim & Morris, 2006; Martin, 2010; Nijman et. al., 2006; Sookhai & Budworth, 2010).

Employee training has long been identified as a factor in improving employee skills and knowledge as well as job performance. In the context of Palestine, academic employees have been sent for training to attain the necessary technical and instructional knowledge, skills and attitude. Training can significantly improve job performance and job-related behaviours as indicated by numerous researchers including Hill and Lent (2006), Satterfield and Hughes (2007), Kraiger (2002), and Arthur et al. (2003).

This current study had only focused on examining educational institutions in Palestine which limits the generalization of its findings. Thus, future studies can expand the study model to examine other types of organizations including the manufacturing and services sectors.

The findings of this study confirmed the benefits of employee training in enhancing job performance. Several practical implications can thus be derived from it. For one, training experts can arrange for process-training support to enhance the possibility of training knowledge transfer. This is especially crucial for new employees who are more likely to need guidance in applying their training knowledge.

References

- Arthur Jr, W., Bennett Jr, W., Edens, P. S., & Bell, S. T. (2003). Effectiveness of training in organizations: a meta-analysis of design and evaluation features.
- Axtell, C. M., Maitlis, S., & Yearta, S. K. (1997). Predicting immediate and longer-term Training Transfer. *Personnel Review*, 26(3), 201-213.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1), 74-94.
- Baldwin T. T. & Ford, J. K. (1988). Training Transfer: a review & directions for future research. *Personnel Psychology*, 41, (1), 63
- Baldwin, T. T., Magjuka, R. J. & Loher, B. T. (1991). The perils of participation: effects of choice of training on trainee motivation and learning. *Personnel Psychology*, 44, 51-65.
- Bates, R., & Khasawneh, S. (2005). Organizational learning culture, learning Work Environmentand perceived innovation in Jordanian organizations. *International journal of training and development*, 9(2), 96-109.
- Berbegal-Mirabent, J., Lafuente, E., & Solé, F. (2013). The pursuit of knowledge transfer activities: An efficiency analysis of Spanish universities. *Journal of Business Research*, 66(10), 2051-2059.
- Blume, B. D., Ford, J. K., Baldwin, T. T., & Huang, J. L. (2010). Training Transfer: A meta-analytic review. *Journal of Management*, 36(4), 1065-1105.
- Bouzguenda, K. (2014). Enablers and inhibitors of learning transfer from theory to practice. In *Transfer of learning in organizations* (pp. 23-44). Springer International Publishing.
- Brinkerhoff, R. O., & Apking, A. M. (2001). *High-impact learning: strategies for leveraging, business results from training*. Basic Books.

- Brinkerhoff, R. O., & Montesino, M. U. (1995). Partnerships for Training Transfer: Lessons from a corporate study. *Human Resource Development Quarterly*, 6(3), 263-274.
- Burke, L. A., & Hutchins, H. M. (2008). A study of best practices in Training Transfer and proposed model of transfer. *Human resource development quarterly*, 19(2), 107-128.
- Cheng, E. W., & Hampson, I. (2008). Training Transfer: A review and new insights. *International Journal of Management Reviews*, 10(4), 327-341.
- Cheng, E. W., & Ho, D. C. (2001). A review of Training Transfer studies in the past decade. *Personnel review*, 30(1), 102-118.
- Colquitt, J. A., LePine, J. A., & Noe, R. A. (2000). Toward an integrative theory of training motivation: a meta-analytic path analysis of 20 years of research.
- Devos, C., Dumay, X., Bonami, M., Bates, R., & Holton, E. (2007). The Learning Transfer System Inventory (LTSI) translated into French: internal structure and predictive validity. *International Journal of Training and Development*, 11(3), 181-199.
- Dumas, A., Hanchane, S., & Silber, J. (2010). On the link between investment in on-the-job training and earnings dispersion: the case of France. In *Jobs, Training, and Worker Well-being* (pp. 1-34). Emerald Group Publishing Limited.
- Ford, J. K., Quiñones, M. A., Sego, D. J., & Sorra, J. S. (1992). Factors affecting the opportunity to perform trained tasks on the job. *Personnel psychology*, 45(3), 511-527.
- Grossman, R., & Salas, E. (2011). The Training Transfer: what really matters. *International Journal of Training and Development*, 15(2), 103-120.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). Multivariate data analysis. Uppersaddle River. Multivariate Data Analysis (5th ed) Upper Saddle River.
- Hedden, H. (Fall, 2011). Supervisors are critical to Training Transfer. ILEETA Digest, 9(3), 6.
- Hill, C. E., & Lent, R. W. (2006). A narrative and meta-analytic review of helping skills training: Time to revive a dormant area of inquiry.
- Hochwarter, W. A., Perrewe, P. L., Ferris, G. R. & Brymer, R. A. (1999). Job satisfaction and performance: the moderating effects of value attainment and affective disposition. *Journal of Vocational Behavior*, *54*, 296-313.
- Hoffmann, V. E., Lopes, G. S. C., & Medeiros, J. J. (2014). Knowledge transfer among the small businesses of a Brazilian cluster. *Journal of Business Research*, 67(5), 856-864.
- Holton, E. F. III (1996). The flawed four-level evaluation model. *Human Resource Quarterly*, 7, 5–21.
- Holton, E. F., III, Bates, R. A., & Ruona, W. E. A. (2000). Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, 11, 333–360.
- Hoyle, R.H., & Panter, A. (1995). Writing about structural equation models. In R. Hoyle (Ed.), Structural equation modeling: Concepts, issues, and applications (pp. 158-176). Thousand Oaks, CA: Sage Publications, Inc.
- Huczynski, A. A., & Lewis, J. W. (1980). An empirical study into the learning transfer process in management training. *Journal of management studies*, 17(2), 227-240.
- Jolly, R., & Wakeland, W. (2009). Using agent based simulation and game theory analysis to study knowledge flow in organizations: The KMscape. *International Journal of Knowledge Management (IJKM)*, 5(1), 17-28.
- Jöreskog, K. G., & Sörbom, D. (1996). LISREL 8: User's reference guide. Scientific Software International.
- Kimmerle, J., Cress, U., & Held, C. (2010). The interplay between individual and collective knowledge: technologies for organisational learning and knowledge building. *Knowledge Management Research & Practice*, 8(1), 33-44.
- Knowles, M., Holton EF III & Swanson, RA. (2005). *The Adult Learner: The definitive classic in adult education and human resource development* (Sixth ed.). Burlington, MA: Elsevier.
- Kontoghiorghes, C. (2008). A holistic approach toward motivation to learn in the workplace. Performance Improvement Quarterly, 14(4), 45-59.
- Kraiger, K. (2002), 'Decision-Based Evaluation', in K. Kraiger (ed.), Creating, Implementing, and
- Latham, G. P., & Wexley, K. N. (1981). Improving performance through effective performance appraisal.
- Lim, D. H., & Morris, M. L. (2006). Influence of trainee characteristics, instructional satisfaction, and organizational climate on perceived learning and Training Transfer. *Human Resource Development Quarterly*, 17(1), 85-115.
- Lim, D. H., & Nowell, B. (2014). Integration for Training Transfer: Learning, knowledge, organizational culture, and technology. In *Transfer of learning in organizations* (pp. 81-98). Springer International Publishing. Maintaining Effective Training and Development: State-of-the-Art Lessons for Practice (San Francisco, A: Jossey-Bass), pp. 331–75.
- Martin, H. J. (2010). Workplace climate and peer support as determinants of Training Transfer. *Human Resource Development Quarterly*, 21(1), 87-104.

- Mohammed Turab, G., & Casimir, G. (2015). A model of the antecedents of Training Transfer. *International Journal of Training Research*, 13(1), 82-95.
- Nijman, D. J. J., Nijhof, W. J., Wognum, A. A. M., & Veldkamp, B. P. (2006). Exploring differential effects of supervisor support on Training Transfer. *Journal of European Industrial Training*, 30(7), 529-549.
- Nikandrou, I., Brinia, V., & Bereri, E. (2009). Trainee perceptions of Training Transfer: an empirical analysis. *Journal of European Industrial Training*, 33(3), 255-270
- Noe, R. A., & Schmitt, N. (1986). The influence of trainee attitudes on training effectiveness: Test of a model. *Personnel psychology*, 39(3), 497-523.
- Nunnally, J. C., & Bernstein, I. H. (1994). The assessment of reliability. *Psychometric theory*, 3(1), 248-292.
- Pearce, J. and Porter, L. (1986). Employee responses to formal performance appraisal feedback. *Journal of Applied Psychology*, 71(2), 211-18
- Quaddus, M., & Hofmeyer, G. (2007). An investigation into the factors influencing the adoption of B2B trading exchanges in small businesses. *European Journal of Information Systems*, 16(3), 202-215.
- Rouiller, J. Z., & Goldstein, I. L. (1993). The relationship between organizational Work Environmentand positive Training Transfer. *Human resource development quarterly*, 4(4), 377-390.
- Ruona, W., Leimbach, M., Holton, E. F., & Bates, R. (2002). The relationship between learner utility reactions and predicted learning transfer among trainees. *International Journal of Training and Development*, 6(4), 218-228.
- Sahinidis, A. G., & Bouris, J. (2008). Employee perceived training effectiveness relationship to employee attitudes. *Journal of European Industrial Training*, 32(1), 63-76.
- Saks, A., & Belcourt, M. (2006). An investigation of training activities and Training Transfer in organizations. *Human Resources Management*, 45(4), 629–648
- Satterfield, J. M., & Hughes, E. (2007). Emotion skills training for medical students: a systematic review. *Medical education*, 41(10), 935-941.
- Sookhai, F., & Budworth, M. H. (2010). The trainee in context: Examining the relationship between self-efficacy and Work Environmentfor Training Transfer. *Human Resource Development Quarterly*, 21(3), 257-272.
- Stanhope, D. S., Pond III, S. B., & Surface, E. A. (2013). Core self-evaluations and training effectiveness: Prediction through motivational intervening mechanisms. *Journal of Applied Psychology*, 98(5), 820.
- Tannenbaum, S. I., and Yukl, G. (1992). Training and development in work organizations. *Annual Review of Psychology*, 43, 399–441.
- Tziner, A., Fisher, M., Senior, T., & Weisberg, J. (2007). Effects of trainee characteristics on training effectiveness. *International Journal of Selection and Assessment*, 15(2), 167-174.
- Uma, J. and Susan, C. (2012). Pre-training, during training and post-training activities as predictors of Training Transfer. *The IUP journal of management research*, XI (4),54-70.
- Velada, R., Caetano, A., Michel, J. W., Lyons, B. D., & Kavanagh, M. J. (2007). The effects of training design, individual characteristics and work environment on Training Transfer. *International Journal of Training and Development*, 11(4), 282-294.
- Xiao J (1996). The Relationship between Organizational Factors and the Training Transfer in the Electronics Industry in Shenzhen, China. *Human Resource Development Quarterly*, 7, 55-73.
- Yamnill, S., & McLean, G. N. (2001). Theories supporting Training Transfer. Human resource development quarterly, 12(2), 195-208.