

## An analysis on the importance of motivation to transfer learning in VUCA environments

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ABSTRACT

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In this VUCA world, much can be achieved when one is open to learning. The purpose of this study is to analyze the impact of organizational learning culture, employee commitment, and job satisfaction towards motivation to transfer learning. The data are collected by distributing 200 questionnaires for employees working in Jakarta area. The method used to do the analysis is by using a multilinear regression. Based on the result, organizational learning culture and job satisfaction had significant impacts to motivation to transfer learning. Meanwhile, employee commitment does not have significant effect on motivation to transfer learning, however, it has an impact on the gender, age, and length of work.

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## 1. Introduction

There are increasingly aspects of rising digital economy because of the current expansion of the global business environment and the advancement of technology. The uncertain yet highly disruptive economic environment also continually pressures incrementally organizations “to understand the future and to plan responses” (Raghuramapatrani & Kosuri, 2017). In a volatility, uncertainty, complexity and ambiguity (VUCA) world, multinational enterprises have pressured themselves to become global organizers of economic systems incorporating knowledge-seeking motives (Cantwell, 2016). The value is not just acquiring it but how the “dissatisfaction of knowledge” causes the idea of transferring the learning (Millar et al., 2018). To deal with VUCA, it would require an effective approach of a better understanding of and coordination between management innovation at the level of functional level (organizational learning culture) and individual level (e.g. job satisfaction, employee commitment) (Singh & Chand, 2018; Horney et al., 2010).

A lot of literature has discussed various attributes and qualities of learning transfer in the context of staff development. Some of the literature has yielded a result based on qualitative method, e.g. collaborative teaching assistants in an intensive Spanish course (Stepp-Greany, 2004), university-level instructional development (Medsker, 1992), among college science professors (Fedock, 1996), and professional development of Canadian educators (Chitpin, 2011). Other studies utilized quantitative method, e.g. how learning transfer inventory dimensions differ across individual variables (Velada & Caetano, 2009), and the relationship between learner utility reactions and predicted learning transfer (Ruona et al., 2002). Even though some studies define the transfer of learning in employee development, the causal linkage has resulted in different indications, i.e. partial or

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no indication of transfer (Addy & Blanchard, 2010; Gibbs & Coffey, 2004; Stes et al., 2010; Dixon & Scott, 2003; Nasmith et al., 1995; Rothman & Robinson, 1977; Sheets & Henry, 1984).

To fill the gap, this study aims to enrich such literature by investigating the interaction among organizational learning culture, employee commitment, and job satisfaction on motivation to transfer learning, notably in terms of quantitative research. Although motivation to transfer learning has been emphasized previously as important to the success of organizational learning and performance, the current study on motivation to transfer learning in employee development context is still limited (Egan, Yang, & Bartlett, 2004). More specifically, the following research questions guided the study:

- Does organizational learning culture have an impact on employee commitment?
- Does organizational learning culture have an impact on job satisfaction?
- Does organizational learning culture have an impact on motivation to transfer learning?
- Does employee commitment have an impact on motivation to transfer learning?
- Does job satisfaction have an impact on motivation to transfer learning?

## 2. Literature review

### 2.1 VUCA

Volatility, Uncertainty, Complexity and Ambiguity, the acronym VUCA, originated in the U.S. military to define conditions military leaders encounter on the battlefield (Whiteman, 1998). VUCA is a concept to know the definition of a competitive environment in relation to digital economy that can be rectified by appropriate technology adaptation to thrive in environmental change at proper time and right stages (Bennett & Lemoine, 2014). In current VUCA environment, organizations should focus on learning organizations by being co-creative and work collaboratively outside the boundaries of the organization (Dhir, 2019; Baltaci & Balci, 2017). Dhir and Mital (2013) propose that organizations must continually take advantage of evolving market opportunities and react quickly to any change or evolutions in market.

### 2.2 Motivation to Transfer Learning

Knowledge required for technological innovation is deemed to be highly tacit in nature (Mudambi & Swift 2012; Dhir & Dhir 2017). Every business leader should focus on learning how to disseminate new knowledge and facilitate effective collaboration, teamwork, and conflict management (Millar et al., 2018). To cope with changes in a VUCA world, an organization needs to focus on the technology-enabling knowledge transfer (Kenney, 2009). In a transfer of learning context, motivation is defined as “a learner’s desire to apply skills, knowledge and/or attitudes mastered in an intervention” (Noe, 1986). Motivation to transfer involves the drive or inspiration of an individual to reassign knowledge gained from formal or informal learning to a job-specific context (Egan et al., 2004).

### 2.3 Employee Commitment

Lo and Ramayah (2009) observed that employees with a sense of commitment are less likely to participate in retirement behaviors and more ready to accept change. Therefore, these values may have severe implications for a core of committed people who are the subject of organizational life. Committed employees are people who are extremely encouraged to contribute their time and energy to the achievement of organizational objectives, thus they are increasingly recognized as the organization’s critical asset (Hunjra, et al., 2010). There are several methods that can be used in order to increase the level of employee commitment such as recognition at work, reward, and better work environment (Pangaribuan & Febriyanto, 2019). The relationship between employee commitment and workers’ performance has been studied in the past. For example, Khan et al. (2010) investigated the impact of employee commitment on employee job performance and found a positive relationship between them.

### 2.4 Organizational Learning Culture

Companies are facing the condition where they need a learning and development of employees in order to compete with the other companies in the competitive market. Therefore, it is not only an individual in organizations that need to learn and grow but it is important also for the company to apply a learning culture (Skerlavaj & Dimovski, 2011). Yang et al. (2004) define organizational learning culture as the culture that promotes information acquisition, distribution and transfer practices for learning-based application and recognition. Organizational learning is a complex process which requires endless period of time that refers to new knowledge development and has the potential for behavioral change (Murray & Donegan, 2003). As knowledge is increasingly becoming a key productivity factor, it has also become a competitive success measurement. Understanding factors contributing to organizational learning and knowledge transfer to the workplace environment is essential for the development of human resources (Swanson et al., 2001).

## 2.5 Job Satisfaction

Job satisfaction is defined as affective reactions of an employee to a job based on a comparison of desired results with actual results (Egan et al., 2004). Therefore, in general many employees measure their level of job satisfaction based on the compensation that the company give to them, the purpose of work, motivation, leadership style and acknowledgment. It is important to maintain the level of job satisfaction of the employees, because it has an impact to their performance in general. Job satisfaction is important to organizations because employees who are satisfied with their job can put more effort into their work (Broome et al., 2009).

## 2.6 Hypothesis Development

Employee commitment may be defined as the degree to which the employee feels dedicated to his organization (Akintayo, 2010). Furthermore, Ongori (2007) explains that level of employee commitment or loyalty to the organization is based on what company offer to them like job enrichment, employee empowerment, and compensation. Based on Tharanganie's (2013) study, employee career commitment negatively affects motivation to transfer learning. However, the findings are contradicting with the study by Cheng and Ho (2001) where employee commitment has a significant impact to motivation transfer learning even though the relationship is weak. Hence the hypothesis:

H<sub>1</sub>: There is an influence of employee commitment towards motivation to transfer learning.

According to Banerjee et al.'s (2017) study, organizational learning culture could help the transfer of learning and training, and also improve the performance of the employee. In an organization, a climate of knowledge transfer may depict flexibility and openness of the management to radical changes, which would create a positive attitude among the employees to generate ideas and innovative solutions (Banerjee et al., 2016). Organization learning culture which reflects the values and beliefs about the importance of learning at work has been found to be positively related to transfer motivation (Zubairy et al., 2015; Egan et al., 2004). Lee et al. (2014) found that employees' level of self-efficacy and organizational commitment had significant effects on motivation to learn, while supervisor and peer transfer support had significant effects on motivation to transfer. Therefore, we posited that:

H<sub>2</sub>: There is an influence of organizational learning culture towards motivation to transfer learning.

Job satisfaction was defined as an employee's affective reactions to a job based on a comparison between desired results and actual results (Egan et al, 2004). Job satisfaction should be considered by organization managers in policy making and as an instrument of competitive advantage. Because if the employee's satisfaction rate were high, it would be better for the organizational performance (Ahmad et al., 2014). A positive relationship was identified between job satisfaction and learning climate (Mikkelsen et al., 2000). Since job satisfaction and organizational learning culture have a powerful connection with job performance, reinforcing them by implementing the correct human resource policies is very important. If the employee is highly happy with his/her jobs, policies, employees, oversight and achieves a high level of general job satisfaction with his/her work, his/her commitment to the organization seems to be more probable than if he/she is not satisfied. (Emami et al., 2012). A correlation between job satisfaction and transfer of learning has been discussed in previous studies (Kontoghiorghes, 2004; Nair, 2007). Therefore, based on the aforementioned discussion, it can be hypothesized that:

H<sub>3</sub>: There is an influence of job satisfaction towards motivation to transfer learning.

## 3. Research Methodology

The method used in this research is a descriptive research using a non-probability sampling. The survey started in January until June 2019 which was administered by utilizing online questionnaire platform comprises of set of questions in Likert scale measurement. The population of the current study includes employees whose offices were located in the city. From 215 distributed questionnaires using Google Form link, only 200 responses are valid resulting in a response rate of 93%. The survey was built based on prior research which uses currently validated scales with the range of response options from "1=strongly disagree" to "5=strongly agree". The original items were in English and were translated into Bahasa Indonesia. The dimensions are adapted from previous studies (Marsick & Watkins, 2003; Hsu, 2009; Irefin & Mechanic, 2014; Ruona et al., 2002). The proposed structural model can be seen in Fig. 1.

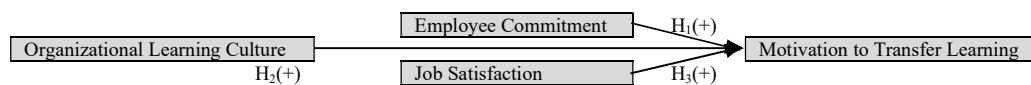


Fig. 1. Conceptual Model of the Research

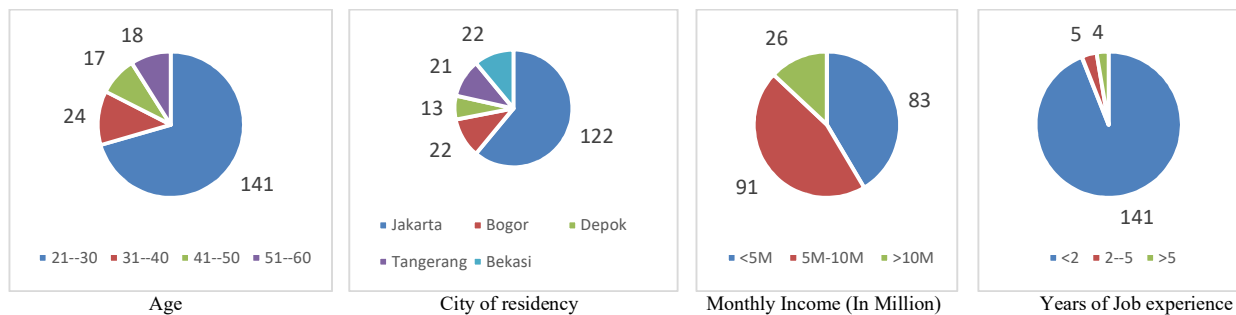
#### 4. Results and discussion

A pretest was conducted based on 30 respondents' data to examine the validity and reliability of the questions. The value of KMO that is greater than 0.5 is barely accepted, below 0.5 unacceptable, between 0.7 and 0.8 good, between 0.8 and 0.9 great, and greater than 0.9 superb. For the anti-image correlations, the values should be above 0.5. In conducting the reliability test, the result of the Cronbach's Alpha value will be a number between 0 and 1 and the test can be accepted if the values are 0.7 or higher. The value of the alpha that is lower than 0.7 is unacceptable and considered unreliable. The summary of the validity and reliability of each questionnaire questions can be seen in Table 1.

**Table 1**  
Validity & Reliability Test Result

Factor	Item	KMO	Correlation Coefficient	Alpha	Remarks
Organizational Learning Culture	OLC1	0.663	0.619	0.874	Valid
	OLC2		0.626		Valid
	OLC3		0.747		Valid
	OLC4		0.666		Valid
Employee Commitment	EC1	0.747	0.752	0.802	Valid
	EC2		0.974		Valid
	EC3		0.775		Valid
	EC4		0.687		Valid
Job Satisfaction	JS1	0.769	0.841	0.917	Valid
	JS2		0.872		Valid
	JS3		0.829		Valid
	JS4		0.901		Valid
	JS5		0.684		Valid
	JS6		0.662		Valid
	JS7		0.753		Valid
	JS8		0.699		Valid
	JS9		0.914		Valid
Motivation to Transfer Learning	MTL1	0.765	0.837	0.866	Valid
	MTL2		0.810		Valid
	MTL3		0.688		Valid
	MTL4		0.705		Valid
	MTL5		0.818		Valid

For demographic profile, the respondent's age (see Fig. 2) is categorized into 4 classifications: 21-30 years old (141 respondents), 31-40 (24), 41-50 (17), and 51-60 (18). The majority of the respondents comes from those who are in the 21-30 years of age range with the total respondents of 141 or 70.5% of the total. For the place of residents, majority comes from Jakarta with the total respondents of 122 or 61%. The respondent's monthly allowance is categorized into three classifications and most of the respondents (45.5%) spent in between 5,000,000 to 10,000,000 rupiahs (equivalent of approximately USD350 to USD700). Out of the three options of length of work that has been presented, majority of the respondents (58.5%) has worked less than 2 years.



**Fig. 2.** Personal characteristics of the participants

**Table 2**  
Multicollinearity Test

Model 1	Tolerance	VIF
OLC	0.383	2.612
EC	0.505	1.981
JS	0.331	3.017

Note: Dependent Variable: MTL

Based on Table 2, the tolerance values for all variables are greater than 0.1 and the VIF values are smaller than 10. Therefore, it can be concluded that the variables are free of multicollinearity, indicating that the correlation between independent variables would not cause any instability in the following regression analysis.

**Table 3**  
Regression Test

Model	R	R-square	Adjusted R-square	Standard error of the estimate
1	0.854	0.729	0.725	1.80711

a. Predictors: (Constant), OLC, EC, JS  
b. Dependent Variable: MTL

The multiple R (R) from the regression test (Table 3) describes the strength of the overall linear relationship. Since the result of the coefficient of determination is close to 0.5, it means that the linear relationship is strong. Besides, the model summary also shows the R Square ( $R^2$ ) which measures the proportion of variation in dependent variable towards the independent variable. The result of R Square is 0.729 which illustrates that 72.9% of MTL can be described through EC, OLC, and JS. The significance threshold for this study is set at  $p \leq 0.05$ . Moreover, the results of the implementation of ANOVA test yields F-Value of 176.057 (Sig. = 0.000) which confirms the regression equation having linear relationship.

**Table 4**  
ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1724.811	3	574.937	176.057	0.000
	Residual	640.064	196	3.266		
	Total	2364.875	199			

a. Predictors: (Constant), OLC, EC, JS  
b. Dependent Variable: MTL

According to the t-test's rule of thumb, to reject the null hypothesis ( $H_0$ ), the  $p$ -value should be less than the alpha of 0.05 and the value of t-test should be higher than the t-table. The result of  $H_1$  signifies that the  $p$ -value of OLC is 0.000 which is lower than  $\alpha$  of 0.05, then it can be concluded that the variable is significant. The value of t-test is 8.304 and the t-table is 1.980. The value of t-test is higher than the t-table, which indicates that the null hypothesis ( $H_0$ ) is rejected. Overall the variable of OLC is significant and null hypothesis ( $H_0$ ) should be rejected while  $H_1$  should be accepted. Therefore, it can be implied that OLC has a positive influence on motivation to transfer learning (MTL). The result of  $H_2$  signifies that the  $p$ -value of EC is 0.198 which is greater than  $\alpha$  of 0.05, then it can be concluded that the variable is not significant. The value of t-test is 1.291 and the t-table is 1.980. The value of t-test is lower than the t-table, which indicates that the null hypothesis ( $H_0$ ) is accepted. Overall the variable of EC is non-significant and null hypothesis ( $H_0$ ) should be accepted while  $H_2$  should be rejected. Therefore, it can be implied that EC does not have any influence on motivation to transfer learning (MTL). The result of  $H_3$  signifies that the  $p$ -value of JS is 0.000 which is lower than  $\alpha$  of 0.05, then it can be concluded that the variable is significant. The value of t-test is 5.729 and the t-table is 1.980. The value of t-test is higher than the t-table, which indicates that the null hypothesis ( $H_0$ ) is rejected. Overall the variable of JS is significant and null hypothesis ( $H_0$ ) should be rejected while  $H_3$  should be accepted. Therefore, it can be implied that JS has a positive influence on motivation to transfer learning (MTL).

**Table 5**  
Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	4.109	0.892		4.606	0.000
	OLC	0.530	0.064	0.501	8.304	0.000
	EC	0.062	0.048	0.070	1.291	0.198
	JS	0.182	0.032	0.369	5.729	0.000

a. Dependent variable: MTL (Motivation to Transfer Learning)  
JS: Job Satisfaction, EC: Employee Commitment, OLC: Organizational Learning Culture

## 5. Conclusion

The main conclusion of this study is that organizational learning culture, job satisfaction, and employee commitment are important antecedents of motivation to transfer learning. However, from the proposed model, one can conclude that the relationship between employee commitment and motivation was not statistically significant. This finding is against the discovery in prior studies (Cheng & Ho, 2001; Lee et al; 2014). The result may give an indication that the employees do not believe that application of new skills and knowledge can lead to job performance and desired/valued outcomes.

Although organizational learning culture seems to be the most important predictor of motivation, one can see that job satisfaction also plays a major role when conserving the effect of the dependent variable as motivation to transfer learning. The confirmation of the positive influence of organizational learning culture on motivation to transfer learning is consistent with the findings of prior studies (e.g., Banerjee et al., 2016; Zubairy et al., 2014; Egan et al., 2004). The research also found that the positive influence of job satisfaction on motivation to transfer learning aligns with prior studies (Kontoghiorghes, 2004; Nair, 2007).

It is important as well to make sure that the organization prepares the working environment that motivates the employees to transfer their knowledge gained while in training to the workplace. To satisfy these professionals, HRD practitioners need to provide an effective learning organization as well as culture of knowledge sharing. Organizations can emphasize organizational learning and knowledge sharing in various ways, e.g. building an effective learning organization, sharing vision with their employees, encouraging team learning in organizations, creating cross-functional work teams and peer discussion groups, and promoting knowledge acquisition and sharing (Hsu, 2009). Internal knowledge of an organization might be combined with those from external to the organization involving the dissemination of learning through meetings or computerized communication networks (Basten & Haamann, 2018; Lichtenthaler, 2016). In a VUCA world, despite the existence of all kinds of risks outside the boundaries, organizations need to do something against the threats and continually explore VUCA environments (Baltacı & Balci, 2017).

Although our proposed structural model was conceptualized in terms of causal relations, this approach using the regression technique does not allow for conclusions to be drawn on causal implication. The fact that the sample for this study comes from participants in certain profession may limit further the generalizability of the findings. Therefore, more research using different sampling approaches and in other industries with different groups of employees is needed.

## References

- Addy, T. M., & Blanchard, M. R. (2010). The problem with reform from the bottom up: Instructional practices and teacher beliefs of graduate teaching assistants following a reform-minded university teacher certificate program. *International Journal of Science Education*, 32(8), 1045-1071.
- Ahmad, N., Javed, N. I. K., & Hamad, N. (2014). Impact of organizational commitment and employee performance on the employee satisfaction. *International Journal of Learning, Teaching and Educational Research*, 1(1), 84-92.
- Baltacı, A. & Balcı, A. (2017). Complexity leadership: A theoretical perspective. *International Journal of Educational Leadership and Management*, 5(1), 30-58
- Banerjee, P., Gupta, R., & Bates, R. (2017). Influence of organizational learning culture on knowledge worker's motivation to transfer training: Testing moderating effects of learning transfer climate. *Current Psychology*, 36(3), 606-617.
- Basten, D., & Haamann, T. (2018). Approaches for organizational learning: A literature review. *SAGE Open*, 8(3), 1-20.
- Bennett, N. & Lemoine, G. J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. *Business Horizons*, 57(2014), 311-317.
- Cantwell, J. (2016). Innovation and international business. *Industry and Innovation*, 24(1), 41-60.
- Cheng, E. W. L., & Ho, D. C. K. A. (2010) Review of transfer of training studies in the past decade. *Personnel Review*, 30(1), 102-118
- Chitpin, S. (2011). Can mentoring and reflection cause change in teaching practice: A professional development journey of a Canadian teacher educator. *Professional Development in Education*, 37(2), 225-240.
- Dhir, S. (2019). The changing nature of work, leadership, and organizational culture in future ready organizations. *CMC Senior Theses*. 2064. [https://scholarship.claremont.edu/cmc\\_theses/2064](https://scholarship.claremont.edu/cmc_theses/2064)
- Dhir, S., & Dhir, S. (2017). Adoption of open-source software versus proprietary software: An exploratory study. *Strategic Change*, 26(4), 363-371.
- Dhir, S., & Mital, A. (2013). Value Creation on Bilateral Cross-Border Joint Ventures: Evidence from India. *Strategic Change*, 22(5-6), 307-326.
- Dixon, K., & Scott, S. (2003). The evaluation of an offshore professional-development programme as part of a university's strategic plan: A case study approach. *Quality in Higher Education*, 9, 287-294.
- Egan, T. M., Yang, B., & Bartlett, K. R. (2004). The effects of organizational learning culture and job satisfaction on motivation to transfer learning and turnover intention. *Human Resource Development Quarterly*, 15(3), 279-298.
- Emami, R., Moradi, E., Idrus, D., & Almutairi, D. O. (2012). Investigating the relationship between organizational learning culture, job satisfaction, and turnover intention in it SMEs. *International Journal of Innovative Ideas*, 12(1), 8-23.
- Fedock, P., Zambo, R., & Cobern, W. (1996). The professional development of college science professors as science teacher educators. *Science Education*, 80(1), 5-19.
- Gegenfurtner, A., Veermans, K., & Festner, D. (2009). Motivation to transfer training: An integrative literature review. *Human Resource Development Review*, 8, 403-423
- Gibbs, G., & Coffey, M. (2004). The impact of training of university teachers on their teaching skills, their approach to teaching and the approach to learning of their students. *Active Learning in Higher Education*, 5(1), 87-100.
- Horney, N., Pasmore, B., & O'Shea, T. (2010). Leadership Agility: A Business Imperative for a VUCA World. *People & Strategy*, 33(4), 33-38.

- Hsu, H. Y. (2009). *Organizational Learning Culture's Influence on Job Satisfaction, Organizational Commitment, and Turn-over Intention among R&D Professionals in Taiwan during an Economic Downturn*. Graduate School of the University of Minnesota.
- Hunjra, A. I., Ali, M. A., Chani, M. I., Khan, H., & Rehman, K. U. (2010). Employee voice and intent to leave: An empirical evidence of Pakistani banking sector. *African Journal of Business Management*, 4(14), 3056-3061.
- Irefin, P., & Mechanic, M. A. (2014). Effect of employee commitment on organizational performance in Coca Cola Nigeria Limited Maiduguri, Borno State. *IOSR Journal of Humanities and Social Science*, 19(3), 33-41.
- Kenney, S. (2009). *The Adaptive Organization: Fostering Change in Five Areas*, Toffler Associates, Retrieved from <http://www.toffler.com/docs/The%20Adaptive%20Organization.pdf>
- Khan, M.R., Ziauddin, Jam F.A., & Ramay, M.I. (2010). The impacts of organizational commitment on employee job performance. *European Journal of Social Sciences*, 15(3), 292-298
- Kontoghiorghes, C. (2004). Reconceptualizing the learning transfer conceptual framework: Empirical validation of a new systemic model. *International Journal of Training and Development*, 8, 210-221.
- Lee, C., Lee, H., Lee, J., & Park, J. (2014). A multiple group analysis of the training transfer model: exploring the differences between high and low performers in a Korean insurance company. *The International Journal of Human Resource Management*, 25(20), 2837-2857.
- Lichtenthaler, U. (2016). Absorptive capacity and firm performance: An integrative framework of benefits and downsides. *Technology Analysis & Strategic Management*, 28(6), 1-13.
- Lo, M. C., & Ramayah, T. (2009). Dimensionality of Organizational Citizenship Behavior (OCB) in a multicultural society: The case of Malaysia. *International Business Research*, 2(1), 48-55.
- Marsick, V., & Watkins, K. (2003). Demonstrating the value of an organization's learning culture: The dimensions of the learning organization questionnaire. *Advances in Developing Human Resources*, 5, 132-151.
- Medsker, K. L. (1992). NETWORK for excellent teaching: A case study in university instructional development. *Performance Improvement Quarterly*, 5, 35-48.
- Mikkelsen, A., Ogaard, T., & Lovrich, N. (2000). Modeling the Effects of Organizational Setting and Individual Coping Style on Employees Subjective Health, Job Satisfaction and Commitment. *Public Administration Quarterly*, 24(3), 371-397.
- Millar, C. C. J. M., Groth, O., & Mahon, J. F. (2018). Management Innovation in a VUCA World: Challenges and Recommendations. *California Management Review*, 61(1), 5-14.
- Mudambi, R., & Swift, T. (2012). Multinational enterprises and the geographical clustering of innovation. *Industry and Innovation*, 19(1), 1-21.
- Nair, P. K. (2007). *A path analysis of relationships among job stress, job satisfaction, motivation to transfer, and transfer of learning: perceptions of occupational safety and health administration outreach trainers*. Doctoral dissertation, Texas A&M University
- Nasmith, L., Saroyan, A., Steinert, Y., Lawn, N., & Franco, E. D. (1995). *Long-term impact of faculty development workshops*. Report of McGill University, Canada.
- Noe, R. A. (1986). Trainees' attributes and attitudes: Neglected influences on training effectiveness. *The Academy of Management Review*, 11(4), 736-749.
- Pangaribuan, C. H., & Febriyanto, R. A. (2019). Motivational impact and value perception of digital badges towards applying for jobs: Evidence from Indonesian undergraduates. *International Review of Management and Marketing*, 9(4), 121-130.
- Raghuramapatruni, R. & Kosuri, S. R. (2017). The straits of success in a VUCA world. *IOSR Journal of Business and Management*, 19(2017), 16-22
- Rothman, A. I., & Robinson, S. (1977). Evaluation of a training course. *Canadian Journal of Higher Education*, 7, 19-35.
- Ruona, W. E. A., Leimbach, M., Holton III, 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.
- Sheets, K. J., & Henry, R. C. (1984). Assessing the impact of faculty development programs in medical education. *Journal of Medical Education*, 59, 746-748.
- Singh, J. P., & Chand, P. K. (2018). A review analysis of job satisfaction as an antecedent of organizational citizenship behaviour. *International Journal of Research and Analytical Reviews*, 5(3), 718-726.
- Stepp-Greany, J. (2004). Collaborative teaching in an intensive Spanish course: A professional development experience for teaching assistants. *Foreign Language Annals*, 37, 417-426.
- Stes, A., Coertjens, L., & Van Petegem, P. (2010). Instructional development for teachers in higher education: Impact on teaching approach. *Higher Education*, 60(2), 187-204.
- Velada, R. & Caetano, A. (2009). Learning transfer – validation of the learning transfer system inventory in Portugal. *Journal of European Industrial Training*, 33(7), 635-656.
- Whiteman, W. E. (1998). *Training and educating army officers for the 21st century: Implications for the United States Military Academy*. Fort Belvoir, VA: Defense Technical Information Center.
- Zubairy, N. F. A. A., Mozie, N. M., & Ghazali, N. (2014). Work Environment and Training Transfer: The Moderating Effects of Motivation. 2014 2<sup>nd</sup> International Conference on Technology, Informatics, Management, Engineering & Environment, Bandung, Indonesia, Aug 19-21.



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