

AN EMPIRICAL STUDY ON ASSESSING THE RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP STYLE AND INFORMAL WORKPLACE LEARNING

Md. Shariful Alam Khandakar 

Faculty of Business Studies,
University of Dhaka, Bangladesh
sharif@du.ac.bd

Faizuniah Pangil

School of Business Management,
Universiti Utara Malaysia
faizun@uum.edu.my

Abstract

Informal workplace learning plays a focal role for developing knowledge and skill of employees which contributes to organization's competitiveness and adaptability. Through informal learning knowledge can be created, acquired and used by others. Though studies had shown that there are many factors that might influence informal workplace learning, little is known about how transformational leadership style influence informal workplace learning. This study reduce the gap by investigating the relationship between transformational leadership style and informal workplace learning among 381 employees working as a head of the department of different branches in private commercial banks of Bangladesh in a quantitative questionnaire and cross sectional study. In this study, Structural equation modelling partial least square (SEM-PLS) was used to test the hypothesis for direct relationship. The result revealed that strong significant and positive relationship exists between transformational leadership style and informal workplace learning. The study also highlighted the implication and direction for future research.

Keywords: Transformational leadership style, Informal workplace learning, Private commercial banks, Bangladesh

INTRODUCTION

In the age of globalization, competitive advantage and success of organization depends on knowledge and skills of employees which leads to better performance (Caudill, 2015). Now a days, technology and infrastructure are similar to all organization and these are not the catalyst for achieving competitive advantage (Azad, 2015). Moreover, competitive advantages of an organization can be achieved by enhancing knowledge and skill of employees through learning. Nzuve and Omolo (2012) suggested that as learning continuously creates innovative knowledge and disperse it all over the organization with a view to manifest it in their products, technologies as well as services, learning of employees is necessary for sustainability of organization.

During the last decade, research on human resource development and practices highly focused on informal workplace learning. It is increasingly important as it incorporated with regular routines and activities and frequently takes place unintentionally or subconsciously (Marsick & Volpe, 1999). Moreover, the wide range of learning in the workplace occurs informally. One of the studies performed by Eichinger and Lombardo (2010) at the Center for Creative Leadership where the result exposed that people learn just only 10% from formal courses and 90% from informal learning(Kajewski & Madsen, 2012). Other studies also demonstrated that people learn 80% informally in the workplace and only 20 % they learn from formal and structured training (Cross, 2007; Marsick & Watkins, 1990).Therefore, in the sphere of learning in workplace, informal learning is highly dominant.

In an organization employees can learn informally to improve their knowledge and skills and prepare them for better performance (Eraut, 2004; Za, Spagnoletti, & North-Samardzic, 2014). However, without huge efforts informal learning in workplace does not happen. Earlier researchers mentioned that various organizational factor can influence informal workplace learning. They also emphasized on importance of transformational leadership style on learning in workplace(Bucic, Robinson, & Ramburuth, 2010; Coad & Berry, 1998). Inauspiciously, to date studies that link transformational leadership style and informal workplace learning in a single framework is still scanty. Therefore, the study intends to explore the link transformational leadership style with informal workplace learning.

LITERATURE REVIEW

Informal workplace learning

Informal workplace learning has received a lot of attention in the extent of learning and development. The concept informal workplace learning refers to the learning which is less predetermined structured, highly learner control, integrated with regular work activities of employees, and hence frequently a by-product of some other activities and often may take place

incidentally or unconsciously (Marsick & Watkins, 2001). Informal learning happens in different way than formal learning process. According to Livingstone (1999) informal learning refers to a form of learning which is associated the improvement of skills, understanding and knowledge and which happens beyond the curricula of educational institutes or programs or courses offered through the different educational or social agencies.

Previously a number of researchers mentioned that informal workplace learning is a type of experiential learning which is not limited to any kind of formal or institutional arrangements (Cunningham & Hillier, 2013; Eraut, 2004; Merriam, Caffarella, & Baumgartner, 2007). As per the concept of Marsick and Volpe (1999) informal learning in workplace indicates a process of learning by which people engage in learning informally with a view to satisfying their requirements without thinking any expressed purpose contrasting their formal learning efforts. Indeed, informal learning denotes learning that happens through social interaction with others in the place of work during the time of working such as interacting with colleagues or performing a group task, dealing with customers, and confronting challenging work activities (Eraut, 2004).

In addition, it is necessary to note that, informal workplace learning happens through three ways in the place of work such as learning with others, self experimentation and external scanning (Choi & Jacobs, 2011). Learning with others happens through learning by sharing experiences and knowledge with others, observing the activities of others and collaborating with the activities of others. Self-experimentation indicates a type of informal learning which occurs when individuals sharply engaged in experimentation and explore new ideas and contrive better technique. Finally, external scanning refers to informal learning which happens when individual involved with external sources such as learning through joining conferences, searching internet, reading journals, and interacting with experts.

Earlier, it is mentioned that a number of organizational factors can encourage employees to involve in informal workplace learning. One of them is transformational leadership style that is adopted by organization (Bucic et al., 2010; Coad & Berry, 1998). Transformational leadership style is an important factor for enhancing informal learning in workplace because it identifies how employees learn in workplace. This is due to the reason that transformational leadership can offer more attention towards informal learning in workplace (Bass, 1990).

Transformational leadership

Transformational leader is a person who can take initiative for greater improvement through changes in beliefs, attitudes, values and needs of the employees with a view to create innovative or revolutionary ideas and offer a vision for future possibilities(Bass, 1985). According to Koehler and Pankowski (1997)the idea of transformational leadership refers to the

process of stimulating change and allowing followers in order to obtain the greatest prominence to advance themselves and organization. Bass and Avolio (1994) mentioned that transformational leadership can be characterized through 4 I'S namely idealized influence, intellectual stimulation, individualized consideration and inspirational motivation. Through idealized influence followers idealize and follow their leader; intellectual stimulation to break away from out dated mode of thinking; individualized consideration 'requirements are individually and fairly met and inspirational motivation inspired to accomplish a common goal (Bass, 1985; Sivanathan & Fekken, 2002). Moreover, LeBrasseur, Whissell, and Ojha (2002) revealed that creating and sharing vision is challenge for organization and suggested that transformational leaders is needed for creating and sharing vision and stimulating employees learning in workplace.

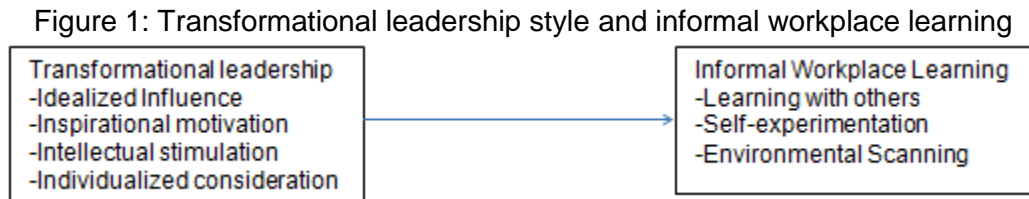
Transformational leadership style and informal workplace learning

Transformational leadership style can play a vital role for enhancing informal workplace learning in the global competitive environment. Over the last 3 decades, the effects of transformational leadership on employees' work-related behavior and attitude have been widely supported in the organization and management studies. Earlier, a mentionable number of researches reported positive effects of transformational leaders on employees, predominantly in areas of employee commitment, satisfaction, and achievement (Piccolo & Colquitt, 2006; Seibert, Wang, & Courtright, 2011). Although evidence shows that impact of transformational leadership style on employees' other outcomes such as innovation, learning is still limited (Bass, 1999; Conger, 1999). Further, some of the studies have been aimed to identify the influence of transformational leadership style on learning in workplace (Hetland, Skogstad, Hetland, & Mikkelsen, 2011; Kurland, Peretz, & Hertz-Lazarowitz, 2010; Montes, Moreno, & Morales, 2005).

Moreover, Garcia-Morales, Matias-Reche, and Hurtado-Torres (2008) and Jung, Wu, and Chow (2008) mentioned that transformational leadership might be significantly related with workplace learning and innovation. Afsar, Badir, and Saeed (2014) administered a study on transformational leadership style and innovative work behavior and identify that positive relationship exists between transformational leadership style and employee creativity of the organization and hence transformational leader motivates the followers towards learning in workplace. Similarly, Loon, Lim, Lee, and Tam (2012) explored that there is a positive association between transformational leadership style and individual-level learning in workplace. Indeed, transformational leadership is a such type of leadership who direct and inspires followers towards learning informally in workplace (Avolio, 1999; Sosik & Jung, 2010).

Based on the discussion above it is expected that Transformational leadership style will have positive influence on informal workplace learning and the following hypothesis is proposed.

Hypothesis: Employees perception of Transformational leadership style is significantly and positively related with informal workplace learning.



RESEARCH METHODOLOGY

The study was performed in Bangladesh with the purpose to comprehend the effect of transformational leadership style on informal workplace learning of employees in branches of private commercial banks.

For this study, data were collected from the head of the department of branches of private commercial banks through questionnaires comprising items measuring all the variables involved. Informal workplace learning was conceptualized from three dimensions and by 12 items adapted from the study of (Choi & Jacobs, 2011). Transformational Leadership style was conceptualized from four dimensions with 20 items Multifactor Leadership Questionnaire (MLQ Form 5x-short) originally developed by Bass and Avolio (1995) and adapted by previous researchers (such as, Ismail, Mohamad, Mohamed, Rafiuddin, and Zhen (2010); Jung & Avolio, 2000). All items for this study were measured by using a five point Likert scale, where by 1 'indicated strongly disagree' and 5 'indicated 'strongly agree'.

A total number of 728 questionnaires were systematically provided among head of the department of 364 branches in private commercial banks of Dhaka division in Bangladesh. Systematic random sampling techniques were used for selecting ultimate respondents. At the end the period of survey, a total number of 403 questionnaires were returned. Out of 403 questionnaires, 381 cases were used for the analysis, showing a response rate of 52.33% and twenty two cases were deleted due to missing values and outliers.

ANALYSIS AND RESULTS

Data analysis was commenced with testing the common method bias using SPSS 22. The findings exposed that the first factor accounted for 29.079% of the variance, which recommended that common method variance had not been a problematic for this study. The

successive analysis employed structural equation modeling (SEM) by Smart PLS 3.0 (Hair, Hult, Ringle, & Sarstedt, 2014). The cause is that its non-parametric characteristics prepare it appropriate for analyzing comparatively small data set with non-normally distributed variables (Chin, 1998).

For convergent validity testing in the measurement model, to find out whether the extent to which multiple items that estimate the similar concepts are in contract, was deployed by testing the factor loadings, Composite Reliability (CR), and the Average Variance Extracted (AVE) as recommended by Hair, Black, Babin, and Anderson (2010). Afterward, the next analysis step was to test the model discriminant validity, which indicates the situation where two or more typically diverse constructs are not related to each other (Sekaran & Bougie, 2010). In case of discriminant validity test, compared the correlation between constructs as well as the square root of the AVE from that construct which is recommended by Fornell and Larcker (1981). Besides, this research also conducted the bootstrapping procedure with 1000 resample to measure the significance of the regression coefficient as recommended by Chin (2010). Moreover, the hierarchical aspects of this study model were captured by three informal workplace learning (learning with others, self-experimentation, external scanning) constructed as first order variables for informal workplace learning and four transformational leadership style (idealized influence, inspirational motivation, intellectual stimulation, individualized consideration) constructed as first order variables for transformational leadership style.

Assessment of Measurement Model

The worth of measurement model were evaluated by observing the indicator reliability (individual loading, cross loading), internal consistency reliability (CR), discriminant validity and convergent validity (AVE) recommended by Hair, Ringle, and Sarstedt (2011).

The loadings for all the items surpassed the recommended value of 0.6 as suggested by Chin, Gopal, & Salisbury, (1997). All the latent constructs composite reliability (CR) also exceeded the cut off value of 0.7 as suggested by Hair et al., (2011) and the latent constructs composite reliability range of this study in between 0.758 to 0.906. The AVE, which reveals total amount of variance in the indicators explained for by the latent construct. The values of AVE were range in between 0.510 to 0.664, which was higher than the threshold value of 0.5 (Hair et al., 2010). Therefore, the result discloses that the required presence of convergent validity exists in the study measurement model (see Table 1).

With confirming the convergent validity, the further step is to check the model's discriminant validity by equating the squared correlations between constructs and the average variance extracted for the construct (Fornell & Larcker, 1981). As depicted in Table 2, the

squared correlations for each constructs were smaller than the AVE by the indicators calculating that constructs, specifying sufficient discriminant validity.

Table 1. Results of the Measurement Model Testing

Constructs	Items	Loadings	AVE	CR
Idealized influence	IDI1	0.717	0.547	0.906
	IDI2	0.725		
	IDI3	0.779		
	IDI4	0.769		
	IDI5	0.801		
	IDI6	0.770		
	IDI7	0.606		
	IDI8	0.732		
Inspirational motivation	IM1	0.788	0.664	0.856
	IM3	0.839		
	IM4	0.818		
Intellectual stimulation	INTST1	0.786	0.609	0.862
	INTST2	0.810		
	INTST3	0.742		
	INTST4	0.782		
Individualized consideration	IC1	0.794	0.569	0.797
	IC2	0.642		
	IC4	0.816		
Transformational leadership style			0.686	0.897
Learning with others	LWO1	0.777	0.510	0.805
	LWO2	0.682		
	LWO3	0.641		
	LWO4	0.748		
Self experimentation	SE1	0.788	0.512	0.758
	SE2	0.690		
	SE3	0.663		
External scanning	EXTS2	0.712	0.518	0.763
	EXTS3	0.674		
	EXTS4	0.770		
Informal workplace learning			0.586	0.808

Note: EXTS1, IC3, IM2, SE4 were deleted due to unsatisfactory loadings.

CR, composite reliability; AVE, average variance extracted.

Table 2. Discriminant Validity

	EXTS	IC	IDI	IM	INTS	LWO	SE
EXTS	0.720						
IC	0.301	0.755					
IDI	0.351	0.590	0.740				
IM	0.248	0.559	0.712	0.815			
INTS	0.318	0.562	0.605	0.550	0.780		
LWO	0.444	0.284	0.425	0.385	0.344	0.714	
SE	0.324	0.234	0.224	0.236	0.266	0.382	0.716

Notes: EXTS, external scanning; IC, individualized consideration; IDI, idealized influence; IM, inspirational motivation; INTS, intellectual stimulation; LWO, learning with others; SE, self experimentation.

Therefore, adequate convergent validity and discriminant validity were depicted in the measurement model.

Assessment of the structural model

As per the view of Duarte and Raposo (2010), the structural model provides the association between latent variables hypothesized in the research model. Once the suitability of the measure was confirmed, it was vital to offer evidence backing the theoretical model as represented by the structural parts of the model (Chin, 2010). The key evaluation criterion for the structural model are the measurement of R2 as well as the level of significance of the path coefficients, which described the variance of endogenous latent variables (Hair et al., 2011).

In PLS, the result of R2 indicates the overall amount of variance in the constructs that is enunciated by the model. As per the suggestion of Cohen (1988), the value of R2 range is in between 0.02 -0.12 indicates weak, 0.13 - 0.25 denotes moderate, and 0.26 and more indicates substantial. However, whether R2 value is high or not is rely upon the particular research context as recommended by Hair et al. (2011). Since the path coefficient shows the hypothesized link among the constructs in the model (Hair, Hult, Ringle, & Sarstedt, 2013), therefore, the each path coefficients of the PLS structural model may be expected as standardised β coefficients of ordinary least squares regression, where the values exists is in the range between -1 and $+1$. When the assessed path coefficient near about to $+1$, indicates strong positive relationship and when the estimated path coefficients near to -1 shows strong negative relationship (Hair et al., 2013). Moreover, the R2 value and the path coefficients (β as well as significance) represent how robust the data support the model assumed (Chin, 1998).

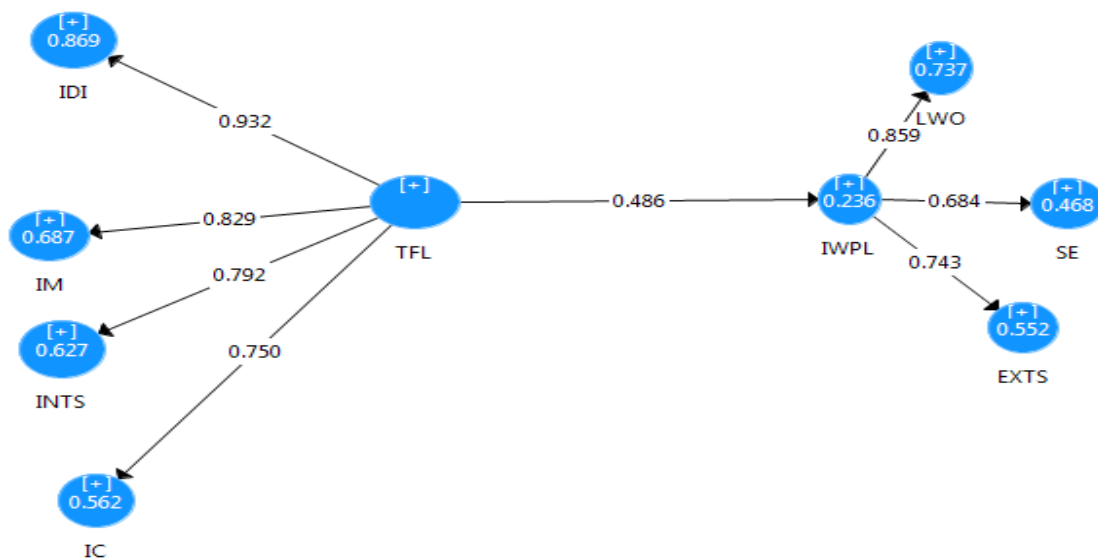
In case of the study, to assess the path coefficient's statistical significance, measured the path coefficients exist in the structural model and conducted the bootstrap analysis. Efron (1979), who's pioneering work on bootstrapping is largely accepted by researchers such as Yung and Bentler (1994), for its capability to achieve better statistics in SEM. According to Chin (2010), the suggested re-sampling rate is 1,000, which the current study applied to examine the significance of the regression coefficients.

Direct Relationships

Through the evaluation of structural model, it is possible to test the hypotheses to describe the direct relationships between independent variables to dependent variable. The results shows that the value of R2 was 0.236, suggesting that 23.6 percent variance of informal workplace learning can be explained by transformational leadership style (see figure 1). The value is considered as moderate (Cohen, 1988).

As demonstrated in Figure 1 and Table 3, hypothesis is supported. Transformational leadership style ($\beta=0.486$, $p<0.01$) is positively and significantly associated with informal workplace learning.

Figure 2. Assessment of structural model



Notes: EXTS, external scanning; IC, individualized consideration; IDI, idealized influence; IM, inspirational motivation; INTS, intellectual stimulation; LWO, learning with others; SE, self experimentation, TFL, transformational leadership; IWPL, informal workplace learning.

Direct relationship hypothesis of transformational leadership was supported.

Variance for informal workplace learning is $R^2=.236$, $Q^2=.067$. $**p<0.01$

Table 3. Hypothesis testing, direct relationship

	Relationship	Std.Beta	SE	T Values	P Values	Decision
Hypothesis	TFL -> IWPL	0.486	0.043	11.25	0.000**	Supported

Notes: TFL, transformational leadership; IWPL, informal workplace learning. ** $p < 0.01$

Moreover, for assessing the predictive relevance of the model, the Stone-Geisser's Q2 predictive sample reuse techniques were employed. As per the suggestion of Henseler, Ringle, and Sinkovics (2009), this measure assesses the research model's capability to predict. However, Stone-Geisser's Q2 shown that the model fulfill the predictive relevance criteria, as the Q2 values for informal workplace learning ($Q2=0.067$) was above zero.

DISCUSSION

The objective of the study was to examine the link between transformational leadership and informal workplace learning of employees working as head of the department of the branches in private commercial banks of Bangladesh. In order to attain the objective of the study, a model was proposed that tested the direct relationship. The rationale for carrying out this analysis was to determine how transformational leadership style influences the employees' Informal workplace learning. The findings explored that transformational leadership ($\beta=0.486$, $p < 0.01$) was identified to be positively and significantly linked to informal workplace learning. The finding is similar with the study of Froehlich, Segers, and Van den Bossche (2014) who have identified that transformational leadership has significant and positive effects on informal workplace learning. Moreover, the finding indicates that private commercial banks of Bangladesh are giving more emphasis on transformational leadership style for enhancing informal workplace learning.

IMPLICATIONS AND FUTURE DIRECTIONS

The body of knowledge regarding informal workplace learning is still evolving. This study expanded the ideas by clarifying the importance of transformational leadership style on informal workplace learning. With a view to promote Informal learning in workplace effort should be given on transformational leadership style. This study also advanced the theoretical perspective of situated learning where organizational factors are the significant predictors of informal learning. As this study focused on transformation leadership style, future study can consider the other types of leadership along with transformational leadership to increase informal workplace learning. This study was conducted among the employees who are working as head of the department. It is possible to conduct the study among other group of employees in banking

sector or other large manufacturing and service organization where learning in workplace is the necessary part of their regular activities.

REFERENCES

- Afsar, B., Badir, Y. F., & Saeed, B. B. (2014). Transformational leadership and innovative work behavior. *Industrial Management & Data Systems*, 114(8), 1270-1300.
- Avolio, B. (1999). *Full Leadership Development: Building the Vital Forces in Organizations*. Thousand Oaks, CA: Sage.
- Azad, M. S. (2015). *HR development: Banking perspective*, Financial Express.
- Bass, B. (1990). From transactional to transformational leadership: Learning to share the vision. *Organisational Dynamics*, 18 (3), 19-31. D. Pitts, J. Marvel and S. Fernandez, S.(2011). So Hard to Say Goodbye, 751-760.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8, 9-32.
- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership and organizational culture. *Public administration quarterly*, 17(1), 112-121.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage.
- Bass, B. M., & Avolio, B. J. (1995). *MLQ multifactor leadership questionnaire*. Redwood City, CA: Mind Garden.
- Bucic, T., Robinson, L., & Ramburuth, P. (2010). Effects of leadership style on team learning. *Journal of workplace learning*, 22(4), 228-248.
- Caudill, J. G. (2015). Employee Motivations for Workplace Learning and the Role of Elearning in the Workplace,". *Internet Learning*, 4(2), 37-48.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Chin, W. W. (2010). *Handbook of partial least squares*. Berlin: Heidelberg: Springer.
- Chin, W. W., Gopal, A., & Salisbury, W. D. (1997). Advancing the theory of adaptive structuration: The development of a scale to measure faithfulness of appropriation. *Information systems research*, 8(4), 342-367.
- Choi, W., & Jacobs, R. L. (2011). Influences of formal learning, personal learning orientation, and supportive learning environment on informal learning. *Human resource development quarterly*, 22(3), 239-257.
- Coad, A. F., & Berry, A. J. (1998). Transformational leadership and learning orientation. *Leadership & Organization Development Journal*, 19(3), 164-172.
- Cohen, J. (1988). *Statistical Power Analysis for the behavioural sciences* (2nd ed.). Hillsdale: Lawrence Erlbaum Associates, NJ.
- Conger, J. A. (1999). Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. *The leadership quarterly*, 10(2), 145-179.
- Cross, J. (2007). *Informal Learning: Rediscovering the Natural Pathways That Inspire Innovation and Performance* (10th ed.). USA: Pfeiffer Books, John Wiley & Sons Inc.
- Cunningham, J., & Hillier, E. (2013). Informal learning in the workplace: key activities and processes. *Education+ Training*, 55(1), 37-51.

- Duarte, P. A. O., & Raposo, M. L. B. (2010). A PLS model to study brand preference: An application to the mobile phone market. In V. E. Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of partial least squares* (pp. 449-485). Berlin Heidelberg: Springer.
- Efron, B. (1979). Bootstrap methods: another look at the jackknife. *The annals of Statistics*, 7(1), 1-26.
- Eichinger, R., & Lombardo, M. (2010). *The Career Architect Development Planner*, (5th ed.) Minneapolis, MN: Lominger.
- Eraut, M. (2004). Informal learning in the workplace. *Studies in continuing education*, 26(2), 247-273.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
- Froehlich, D., Segers, M., & Van den Bossche, P. (2014). Informal workplace learning in Austrian banks: The influence of learning approach, leadership style, and organizational learning culture on managers' learning outcomes. *Human resource development quarterly*, 25(1), 29-57.
- Garcia-Morales, V. J., Matias-Reche, F., & Hurtado-Torres, N. (2008). Influence of transformational leadership on organizational innovation and performance depending on the level of organizational learning in the pharmaceutical sector. *Journal of organizational change management*, 21(2), 188-212.
- Hair, J. F., Black, W., Babin, B. J. Y., & Anderson, R. E. (2010). *Multivariate data analysis. A global perspective* (seventh ed.): Pearson Prentice Hall: Upper Saddle River.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2013). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*: SAGE Publications, CA.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)* (1st ed.). Los Angeles: Sage Publications.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in international marketing*, 20(1), 277-319.
- Hetland, H., Skogstad, A., Hetland, J., & Mikkelsen, A. (2011). Leadership and learning climate in a work setting. *European Psychologist*.
- Ismail, A., Mohamad, M. H., Mohamed, H. A.-B., Rafiuddin, N. M., & Zhen, K. W. P. (2010). Transformational and transactional leadership styles as a predictor of individual outcomes. *Theoretical and Applied Economics*, 6(6), 89.
- Jung, D. D., Wu, A., & Chow, C. W. (2008). Towards understanding the direct and indirect effects of CEOs' transformational leadership on firm innovation. *The leadership quarterly*, 19(5), 582-594.
- Jung, D. I., & Avolio, B. J. (2000). Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of organizational behavior*, 21(8), 949-964.
- Kajewski, K., & Madsen, V. (2012). *Demystifying 70:20:10*, Whitepaper. from [Online] available: https://www.deakinprime.com/deakinprime/resources/pdf/whitepapers/DeakinPrime_70.20.10_WhitePaper.pdf (23 December 2014)
- Koehler, J. W., & Pankowski, J. M. (1997). *Transformational leadership in government*. Delray Beach, FL: St. Lucie Press.
- Kurland, H., Peretz, H., & Hertz-Lazarowitz, R. (2010). Leadership style and organizational learning: The mediate effect of school vision. *Journal of Educational Administration*, 48(1), 7-30.
- LeBrasseur, R., Whissell, R., & Ojha, A. (2002). Organisational learning, transformational leadership and implementation of continuous quality improvement in Canadian hospitals. *Australian journal of management*, 27(2), 141-162.
- Li, C.-K., & Hung, C.-H. (2009). The influence of transformational leadership on workplace relationships and job performance. *Social Behavior and Personality: an international journal*, 37(8), 1129-1142.

- Livingstone, D. W. (1999). Exploring the icebergs of adult learning: Findings of the first Canadian survey of informal learning practices. *The Canadian Journal for the Study of Adult Education*, 13(2), 49.
- Loon, M., Lim, Y. M., Lee, T. H., & Tam, C. L. (2012). Transformational leadership and job-related learning. *Management Research Review*, 35(3/4), 192-205.
- Marsick, V., & Watkins, K. (1990). *Informal and incidental learning in the workplace*. New York, NY: Routledge.
- Marsick, V. J., & Volpe, M. (1999). The nature and need for informal learning. *Advances in Developing Human Resources*, 1(3), 1-9.
- Marsick, V. J., & Watkins, K. E. (2001). Informal and incidental learning. *New directions for adult and continuing education*, 89, 25-34.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide*. Jossey-Bass, San Francisco, CA: SAGE PUBLICATIONS INC.
- Montes, F. J. L., Moreno, A. R., & Morales, V. G. (2005). Influence of support leadership and teamwork cohesion on organizational learning, innovation and performance: an empirical examination. *Technovation*, 25(10), 1159-1172.
- Nzuve, S. N., & Omolo, E. A. (2012). A study of the practice of the learning organization and its relationship to performance among Kenyan commercial banks. *Problems of Management in the 21st Century*, 4(2), 45-56.
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management journal*, 49(2), 327-340.
- Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: A meta-analytic review. *Journal of applied psychology*, 96, 981-1003.
- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (5th ed.). United Kingdom: John Wiley & Sons.
- Sivanathan, N., & Fekken, G. C. (2002). Emotional intelligence, moral reasoning and transformational leadership. *Leadership & Organization Development Journal*, 23(4), 198-204.
- Sosik, J. J., & Jung, D. I. (2010). *Full range leadership development: Pathways for people, profit and planet*. New York, NY: Routledge.
- Yung, Y. F., & Bentler, P. M. (1994). Bootstrap-corrected ADF test statistics in covariance structure analysis. *British Journal of Mathematical and Statistical Psychology*, 47(1), 63-84.
- Za, S., Spagnoletti, P., & North-Samardzic, A. (2014). Organisational learning as an emerging process: The generative role of digital tools in informal learning practices. *British Journal of Educational Technology*, 45(6), 1023-1035.