

**THE EFFECT OF ONLINE TRAINING AND TRANSFORMATIONAL LEADERSHIP ON PERFORMANCE WITH INNOVATIVE WORK BEHAVIOR AS A MEDIATION VARIABLE**

**(A Case Study on Teacher in the State of Senior High School Tangerang Regency)**

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**Abstract**

This study analyzes the influence of online training (OT), transformational leadership (TL), Teacher Performance, Innovative Work Behaviors (IWB), and Innovative Work Behavior (IWB) the role mediation online training, Transformational leadership on teacher performance. The population this study is civil servant teachers SMAN located in Cluster 02 Tangerang Regency, with a sample of 69 teachers. The analysis tool is Partial Least Square (PLS). The results of the study, online training has a direct effect on teacher performance. Transformational leadership has no direct effect on teacher performance. IWB has a partially mediating role through transformational leadership on teacher performance. However, unlike online training and performance, IWB do not mediate the relationship between the two. This research is expected to contribute knowledge about the influence of online training and TL on teacher performance and the variable role of mediation on IWB. The weakness of this study is the small population and learning activities are conducted face to face and under normal conditions during the covid-19 pandemic.

**Keywords:** online training, transformational leadership, teacher performance, innovative work behavior.

**1. Introduction**

Teacher performance results from teacher activities in carrying out their duties and obligations as teachers and educators in the school that can describe work in carrying out all their duties. Teachers play a variety of roles in managing learning situations both as educators, facilitators, instructor mediators. Nowadays, most teachers aren't absolutely privy to the demanding situations within side the international of education. Teachers manage many criticisms of teaching methods and activities in their classrooms. Therefore, teachers must equip themselves with skills and teaching competencies and be sensitive to developing the current world of education, (Mustafa & Othman, 2010).

Teacher performance often undergoes significant changes, as an example in Banten Province, which experienced fluctuations from the last five years, namely from 2014-2018.

Years	Teacher Performance Value (%)	Description
2014	46,32	above the government standard value
2015	51,76	below the government standard value
2016	35,45	below the government standard value
2017	65,6	below the government standard value
2018	55,9	below the government standard value

*Figure 1. Teacher Performance*

Source: Ministry of Education and Culture of the Republic of Indonesia (2018)

The data showed that teacher performance in 2014 obtained 46.32% with an average government score of 44.75%. In 2015 it was 51.76%, less than the government's average score of 52.37%. In 2016 it got a score of 35.45% less than the government's average score of 63.79%. In 2017 it scored 65.6% less than the government's average score of 69.55% and in 2018 it scored 55.9%, less than the government's average score of 56.69 %.

The Covid-19 pandemic makes online learning no longer an option. However, online learning is a must and is the only option in learning activities. According to the joint decree, 4 Ministers confirmed that online learning in most Indonesia would be extended until the end of the year. That clearly provides a brand new venture for each Indonesian training actor. This online learning has added to the complexity of national education problems that have also previously been complex. The government stipulates that learning activities are conducted online. One of the matters that want to be taken into consideration in instructional institutions' idea is enhancing trainer know-how and talents thru a based collection of activities. E-learning-especially based entirely on trainer education is a form. Teacher training is an effort to improve teacher skills to have an impact in improving performance eventually. With training, the job demands will be met to advance the performance of the work. In practice, training can be narrowly focused on learning specific or perhaps broader skills, intended to develop an understanding of the production process, encourage reflection on how work is done to other functions, and develop creativity to carry out tasks more effectively, (Sung, & Choi, 2014).

In addition to training, another thing to note is leadership style. Leadership is the capacity of people or corporations to steer and manual groups or different participants of a business enterprise that makes them paintings according to the desires set. Transformational leadership is a process in which leaders play idealized role models, stimulates and encourages innovative work behaviors, provides inspiring motivation, and engages in supporting and guiding followers to achieve the vision and common goals of the organization (Bass & Avolio, 1994; T.C. Bednall, 2018); Taghrid S. Suifan, 2018). The development of information technology is increasing advanced and rapid, but it will be difficult for companies to get what they want without human capital. Therefore, training and leadership in an organization are important things to do because they impact the progress of the organization. The trouble of schooling and management in an employer is critical that influences the backward and forward of the employer. However, another important factor in determining an organization's competitive advantage is employee innovative

work behaviour, (Shung Jae Shin, 2016; Haifeng Wang, 2018). Innovative work behavior refers to activities related to employee development, promotion, and implementation of useful innovations at every level of the organization, (Johannes Rank, 2004).

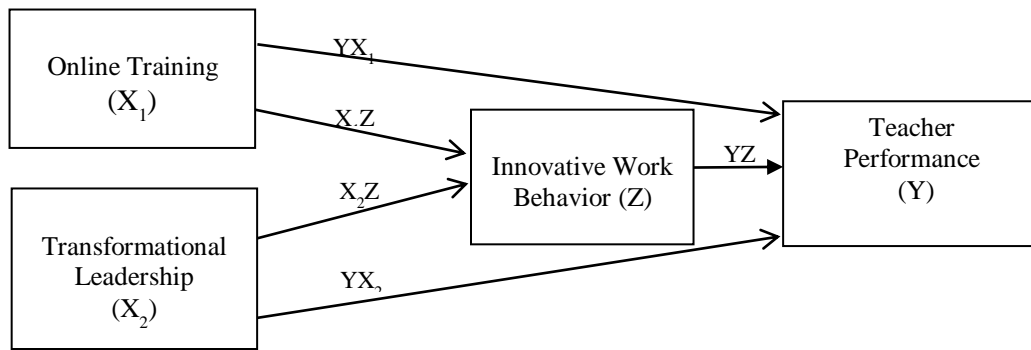
In his book A Noe Raymond, et al. (2010:351) that training refers to planned efforts by a company to facilitate employee learning about work-related competencies. These competencies include knowledge, skills, or behaviors that are essential for achieving work achievements to succeed. The purpose of training is for employees to master the knowledge, skills and behaviors emphasized in the training program and applied them to their daily activities. According to Snell and Bohlander (2007:303), E-learning is getting simpler, audiovisual programs and computer-oriented training methods. E-learning includes applications such as web and computer-based training and virtual classes. E-learning changes the learning process in several ways. It allows companies to bring training to employees, which is generally more efficient and cost-effective. The implementation of training activities consists of several models, namely training conducted offline and online. Offline training is training that is conducted face-to-face between trainers and trainees. At the same time, online training is training conducted by participants without having to date directly to the training ground.

According to Danim (2004:54), transformational leadership is defined as a leader's ability to work with and through others to transform optimally organizational resources to achieve meaningful goals, according to predetermined achievement targets. There are numerous dimensions and signs of transformational leadership. In Bass et al. (2003) suggests there are 4 (four), namely: 1) Idealized influence or charisma, 2) Inspirational motivation, 3) Individualized consideration, 4) Intellectual stimulation.

According to Janssen (2000), innovative behavior is defined as creative, introduction, introduction and application of new ideas in a job or organization to gain an advantage in operations. In Hertog (2014) says, In addition, innovative work behavior is a series of work activities that workers gradually carry out in developing and improving effective Innovation.

Performance (work performance) results from the quality and quantity of work achieved by an employee in carrying out his duties by his responsibilities (Mangkunegara, 2001:67). According to Mathis and Jackson (2006), performance is everything that can affect how much they contribute to the organization.

Based on the background, some hypothesis is formulated to see the relationship between the variables tested in this study. Based on the relationship between variables described previously, the following is the conceptual framework developed in this study.



**Figure 2. Framework**

Figure 2 shows the conceptual framework in this study. Based on the picture, the following hypothesis can be formulated.

1. H1: Online training significantly affects teacher performance.
2. H2: Transformational leadership significantly affects teacher performance.
3. H3: Online training significantly affects innovative work behaviors.
4. H4: Transformational leadership significantly affects innovative work behavior.
5. H5: Innovative work behavior significantly affects performance.
6. H6: Online training significantly affects teacher performance through innovative work behavior.
7. H7: Transformational leadership significantly affects teacher performance through Innovative work behavior.

## 2. Method

This research uses quantitative methods in testing and proving hypotheses that have been made through various tests and data management. The population used in this study is all civil servant teachers who teach in The State High School (SMAN) Cluster 02 Tangerang District, which amounts to 69 teachers. The type of sampling used in this study is nonprobability sampling with saturated sampling techniques or often called a census. So that will be used as a sample in this study is all teachers from the population consisting of all civil servant teachers who teach at SMA Negeri 3 Tangerang, SMA Negeri 4 Tangerang, and SMA Negeri 15 Tangerang regency with the number of teachers as many as 69 teachers.

The data collection used primary and secondary sources. As for obtaining primary data, researchers conducted the dissemination of questionnaires to respondents through google form online and offline and social media Whatsapp. The questionnaire used in this study was a questionnaire with a Likert scale model. Each answer point has a different score, namely: for the answer strongly agree (score 5), agree (score 4), neutral (score 3), disagree (score 2), and strongly disagree (score 1).

The data analysis technique in this study uses Partial Least Square (PLS) using SmartPLS 3.2.9 software. PLS is a structural equation modeling (SEM) approach based on variance or

component-based structural equation modeling. According to Ghozali & Latan (2015), PLS-SEM aims to develop a theory or build a theory (predictive orientation). PLS is used to explain the relationship between latent variables (prediction). PLS is a powerful analytical method because it does not assume the data should be with a certain scale measurement and a small number of samples (Ghozali, 2011).

### 3. Results

#### Descriptive Respondents

The subjects in this study were distinguished by gender, age, last education, and tenure. Respondents who are male as many as 33 people or 48% and 36 or 52% of respondents are female. Respondents by age, aged over 45 years were 60.9%, aged 40-45 years were 24.6%, aged 30-40 years were 8.7%, aged 30-35 years were 4.3%, and those aged less from 30 years as much as 1.4%. According to the latest education, strata-1 (S1) as much as 70% and education strata-2 (S2) as much as 30%. According to years of service, the respondents, working period of fewer than five years as much as 4%, working 5-10 years as much as 2%, working more than ten years as much as 94%.

#### Convergent Validity

The convergent validity of the measurement model with reflective indicators can be seen from the correlation between the score/indicator item and its construct score. Individual reflective measures are high if they correlate from 0.70 to the construct they want to measure. However, at the research stage of scale development, loading 0.50 to 0.60 is still acceptable (Ghozali & Latan, 2015).

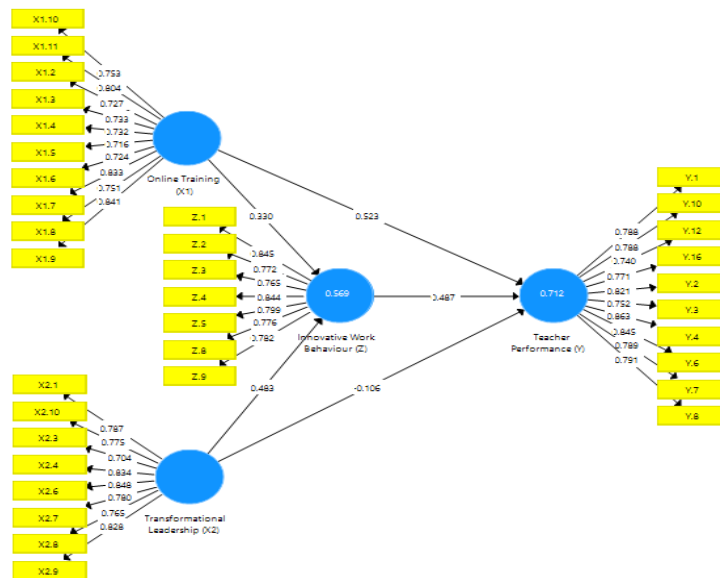


Figure 3. Loading Factor Modified Variables

Based on figure 3. Showing all indicators has a loading factor value above 0.7, meaning that all indicators are valid in measuring the construct. Another method to see the loading factor value of each indicator, the convergent validity, can be done by looking at the AVE value of each construct. The model is stated to have fulfilled the required convergent validity if each construct has an AVE value above 0.5.

**Table 1. Average Variance Extracted (AVE) Value of each Variable**

	Average Variance Extracted (AVE)
Transformational leadership	0.626
Teacher performance	0.633
Online training	0.582
Innovative work behavior	0.637

Table 1. above shows and is known that the AVE value for all variables has a value above 0.5.

**Reliability**

A reliability test is a measurement tool of a questionnaire that becomes an indicator of variables or constructs. A questionnaire or measuring instrument can provide stable or constant measuring results when the measuring instrument is reliable or reliable. Constructs are reliable if the composite reliability value of Cronbach's coefficient alpha is more than 0.7(Ghozali, 2011:43).

**Table 2. Cronbach's Alpha Coefficient and Composite Reliability Value**

	Cronbach's Alpha	Composite Reliability
Transformational leadership	0.914	0.930
Teacher performance	0.935	0.945
Online training	0.920	0.933
Innovative work behavior	0.905	0.925

Table 2. shows that Cronbach's coefficient alpha and composite reliability values for the variables studied are online training, transformational leadership, innovative work behavior, and teacher performance of more than 0.7.

**Discriminant Validity**

*Table 3. Deskriminan Validity*

	Transformasional Leadership (TL)	Teacher Perfomance (TP)	Online Training (OT)	Inovatif Work Behavior (IWB)
TL	0.791			
TP	0.617	0.796		
OT	0.713	0.776	0.763	
IWB	0.718	0.763	0.674	0.798

**Path Coefficient**

The t-count value is 1,975 as the basis for decision-making. The hypothesis is accepted if the t-statistic is more than 1,975, and the hypothesis is rejected if the t-statistic is less than 1,975. As for the significance of the P-value, if P-value is less than 0.05, then the hypothesis is accepted, and if the p-value is more than 0.05, then the hypothesis is rejected.

**Table 4. Path Coefficient**

	Path Coefficient	T Statistics	P Values
Direct Relation			
OT -> TP	0.523	4.006	0.000
TL -> TP	-0.106	0.823	0.411
OT -> IWB	0.330	2.448	0.015
TL -> IWB	0.483	3.721	0.000
IWB -> TP	0.487	3.174	0.002
Indirect Relation			
OT -> TP -> IWB	0.160	1.696	0.091
TL-> TP -> IWB	0.235	2.720	0.007

The coefficient path value shows that online training has a significant effect on teacher performance, for transformational leadership has no significant effect on teacher performance. As for online training on innovative work, behaviors have a significant effect, transformational leadership has a significant effect on innovative work behaviors, and innovative work behaviors significantly impact teacher performance. The coefficient path directly influences online training on teacher performance by 0.523 and indirectly influences both through innovative work behavior of 0.160. So it can be known that the direct influence of online training on teacher performance outweighs the indirect influence between the two. The direct effect of transformational leadership on performance is greater than the indirect effect of both through innovative work behaviour.

**4. Discussion**

The results showed that the path coefficient obtained was 0.523 with a t-statistic of 4.006 > t-table 1.975 and P values of 0.000 < 0.05, thus H1 was accepted so that it could be concluded that OT had a significant effect on TP. It means that online training conducted by teachers influences performance, so to improve performance, it is necessary to conduct training to increase teacher knowledge and skills. These results are in line with previous research conducted by (Ahmad Badawi Saluy et al., 2019); L.B.Martinsa et al., 2019), which said online training had a positive and significant effect on performance.

Based on the path coefficient value of -0.106 with t-statistic 0.823 < t-table 1.975 and P values of 0.411 > 0.05, thus H2 is rejected, TL has no significant effect on TP. The higher or the presence of leadership felt by the teacher does not affect teacher performance. This right is due to the

COVID-19 pandemic situation, where teachers do not carry out learning activities directly at schools. This condition is not in line with research conducted by (Thomas W.H.Ng, 2017; Chuang Rang et al., 2020), which states that transformational leadership positively affects performance.

Online training (OT) has a positive and significant effect IWB. Teachers' online training in carrying out their duties is very important to generate innovation and achieve the expected organizational goals. It is in line with research (Manresa et al., 2019; Singh et al., 2020) which says that training is positively related to behavior.

Based on the path coefficient value of 0.483 with t-statistic  $3.721 > t\text{-table } 1.975$  and p values of  $0.000 < 0.05$ . Thus H4 is accepted. Thus, it can be concluded that TL has a positive and significant effect on IWB. It means that transformational leadership has a positive and significant influence on improving teachers' innovative work behavior. It is in line with research conducted by (Choi et al., 2016; Dewi Kania et al., 2018), which states that transformational leadership significantly affects innovative work behavior.

Based on the path coefficient value of 0.487 with t-statistic  $3.174 > t\text{-table } 1.975$  and p values of  $0.002 < 0.05$ , thus H5 is accepted to conclude that IWB has a positive and significant effect on TP. It means that the higher the innovative work behavior of teachers, the will impact increasing performance in line with research conducted by (Min-Seong Kim and Dong-Woo Koo, 2017; Shanker et al., 2017; Purwanto et al., 2020; Dyah Parama Puspita Sari, Anang Kistyanto, 2020) which states that innovative work behavior influences positive and significant on employee performance. Innovative work behavior will affect the performance achieved by applying technology-based knowledge and skills improvement activities to trigger innovation initiatives and implementation actions of innovation.

Innovative work behavior (IWB) acts as a mediator between Transformational leadership and teacher performance. To improve performance, a teacher must have a leadership spirit that is supported by innovation. The results of this study were strengthened in previous studies (Choi et al., 2016; Shanker et al., 2017; Dewi Kania et al., 2018; Riu Tayal et al., 2018; Purwanto et al., 2020; Dyah Parama Puspita Sari, Anang Kistyanto, 2020 ) which states that innovative work behavior plays a mediating role on performance and there is a positive relationship between transformational leadership through innovative work behavior.

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**References**

- Agus Purwanto, Mirza Prameswari, Masduki Asbari, Mohamad Ramdan, & Samuel Setiawan. (2020). Dampak Kepemimpinan, Budaya Organisasi dan Perilaku Kerja Inovatif terhadap Kinerja Pegawai Puskesmas. *Jurnal Ilmu Masyarakat*, 9 (1):19-27. <http://dx.doi.org/10.13140/RG.2.2.25128.52489>
- Ahmad Badawi Saluy, Tersia Musanti, & Bambang Mulyana. (2020). Pengaruh Pelatihan, Motivasi Kerja dan Kompensasi terhadap Kinerja Personel Di Makosek Handunas 1. *Journal of Management and Business Review*, Vol 16, No.1,pp.87-109, <https://doi.org/10.34149/jmbr.v16i1.151>
- Ala'aldin Alrowwad, Shadi Habis Abualoush, & Ra'ed Masa'deh (2020). Innovation and intellectual capital as intermediary variables among transformational leadership, transactional leadership, and organizational performance. *Journal of Management Development*, Vol. 39, No.2, pp.196-222, <https://doi.org/10.1108/JMD-02-2019-0062>
- Alba Manresa, Andrea Bikfalvi, & Alexandra Simon. (2019). The impact of training and development practices on innovation and financial performance. *Industrial and Commercial Training*, Vol. 51, No.7/8, pp. 421-444, <https://doi.org/10.1108/ICT-04-2019-0035>
- Ashkan, Khalili. (2016). Linking transformational leadership, creativity, innovation, and innovation-supportive climate. *Management Decision*. Vol. 54, No.9, pp.2277-2293. <http://dx.doi.org/10.1108/MD-03-2016-0196>
- Bass, B.M, & Avolio,B.J., (1994). Improving Organizational Effectiveness through Transformational Leadership, Sage: Thousand Oaks.
- Bass, B.M., Avolio, B.J., Jung, D.I., & Berson, Y, (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207-218. <https://doi.org/10.1037/0021-9010.88.2.207>
- Bass, B., & Riggio, R. (2006). **Transformational leadership**. (2nd Ed). New Jersey: Lawrence Erlbaum Associates Publishers.
- Bednall, T.C., Rafferty, A.E., Shipton, H., Sanders, K., & Jackson, C.J. (2018). Innovative behavior: How much transformational leadership do you need?: *British Journal of Management*, Vol.00,1-21, <https://doi.org/10.1111/1467-8551.12275>
- Bilal Afsar, & Waheed Ali Umrani. (2020). Transformational leadership and innovative work behavior.The role of motivation to learn, task complexity, and innovation climate. *European Journal of Innovation Management*, Vol. 23 No. 3, pp. 402-428, <https://doi.org/10.1108/EJIM-12-2018-0257>
- Bos-Nehles, A., Renkema, M., & Janssen, M. (2017). HRM and innovative work behavior a systematic literature review: *Personnel Review*, Vol. 46, No. 7, pp. 1228-1253, <https://doi.org/10.1108/PR-09-2016-0257>
- Danim, Sudarwan. (2004). Motivasi Kepemimpinan dan Efektivitas Kelompok. Jakarta: Rineka Cipta Utama.

- De Jong, J.PJ., & Den Hertog, D.N. (2010). Measuring innovative work behavior: *Creativity and Innovation Management*, Vol.19, No.1, pp.23-36. <http://dx.doi.org/10.1111/j.1467-8691.2010.00547.x>
- Dewi Kania, Syamsul Hadi Senen, & Masharyono. (2018). Analisis Gambaran Kepemimpinan Transformasional, Work Engagment dan Perilaku Kerja Inovatif Karyawan: *Journal of Bussiness Management Education*, Volume 3, No.3, p. 79-88. <http://dx.doi.org/10.17509/jbme.v3i3.14311>
- Dyah Parama Puspita Sari, & Anang Kistyanto. (2020). Pengaruh leader member exchange terhadap kinerja karyawan yang memediasi oleh innovative work behaviour (Studi pada PT Taspen Persero Cabang Utama Surabaya): *Jurnal Ilmiah MEA*, Vol.4, No.2, P-ISSN; 2541-5255 E-ISSN: 2621-5306.
- Gozali, Imam, & Hengky Latan. 2015. Konsep, Teknik, Aplikasi Menggunakan Smart PLS 3.0 untuk Penelitian Empiris. BP Undip: Semarang.
- Intan Cahya Kurniasari, Armanu Thoyib, & Rofiaty. (2018). Peran Komitmen Organisasional dalam Memediasi Pengaruh Kompetensi, Pelatihan dan Budaya Organisasi terhadap Kinerja Perawat: *MIX: Jurnal Ilmiah Manajemen*, Volume 8, No.2. <http://dx.doi.org/10.22441/mix.2018.v8i2.010>
- Isabel Build, Eva Matinezb, & Jorge Matute. (2019). Transformational leadership and employee performance: The role of identification, engagement and proactive personality: *International Journal of Hospitality Management*, 77, 64-75. <https://doi.org/10.1016/j.ijhm.2018.06.014>
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness, and innovative work behavior: *Journal of Occupational and Organizational Psychology*, Vol.73, No.3, pp.287-302.
- Latan, H., & Ghozali, I. (2012). Partial Least Squares Konsep, Teknik dan Aplikasi Menggunakan Program Smart PLS 2.0 M3. Semarang: BP Undip.
- L.B. Martinsa, Thais Zerbinib, & Francisco J. Medinac. (2019). Impact of Online Training on Behavioral Transfer and Job Performance in A Large Organization: *Journal of Work and Organizational Psychology*, 35 (1), pp.27-37. <http://dx.doi.org/10.5093/jwop2019a4>
- Mangkunegara, Anwar Prabu. (2001). Manajemen Sumber Daya Manusia Perusahaan. Bandung: PT. Remaja Rosdakarya.
- Mathis Robert L, & Jackson John H. 2006. Human Resource Management. Alih Bahasa. Jakarta: Salemba Empat.
- Muhammed Abu Nasra, & Khalid Arar. (2020). Leadership Style and Teacher Performance: Mediating Role of Occupational Perception: *International Journal of Educational Management* Vol.34, No.1, pp.186-202. <http://dx.doi.org/10.1108/IJEM-04-2019-0146>
- Mustafa, M.N., & N Othman. 2010. The effect of motivation on teacher's work performance in Pekanbaru Senior High Schools, Riau Province, Indonesia: *Jurnal Sosiohumanika*, 3(2). <https://journals.mindamas.com/index.php/sosiohumanika/article/view/416>

- Nishant Singh, Umesh Bamel, & Veena Vohra. (2020). The Mediating Effect of Meaningful Work between human resource practices and innovative work behaviour: a study of emerging market. *Employee Relations: The International Journal*. 0142-5455, <https://doi.org/10.1108/ER-04-2020-0150>
- Noe, Raymond A., et al. (2010). *Manajemen Sumber Daya Manusia : Mencapai Keunggulan Bersaing*. Jakarta : Salemba Empat.
- Rank, J., Pace, V.I., & Frese, M. 2006. There avenue for future research on creativity, innovation, and initiative. *Applied Psychology: An International Rewiew*, 53: 518-528, <https://doi.org/10.1111/j.1464-0597.2004.00185.x>
- Roy Shanker, Ramudu Bhanugopan, Beatrice I.J.M. Van Der Heijden, & Mark Farrell. (2017). Organizational clime for innovation and organizational performance: The mediating affect of innovative work behavior: *Journal of Vocational Behaviour*, 100, 67-77. <https://doi.org/10.1016/j.jvb.2017.02.004>
- Ronnie Gaoa, William H. Murphyb, & Rolph E. Anderson. (2020). Transformational leadership effect on salespeople's attitudes, striving, and performance: *Journal of Business Research*, 110, 237-245. <https://doi.org/10.1016/j.jbusres.2020.01.023>
- Shin, S.J., Yuan, F., & Zhou, J. (2016). When perceived innovation job requirement increases employee innovative behaviour: A sensemaking persepective. *Journal of Organizational Behaviour*, <https://doi.org/10.1002/job.2111>
- Snell Scott, & George Bohlander. (2007). *Human Resource Management*. Thomson Higher Education. Thomson South-Western.
- Suifan, T.S., Abdallah, A.B., & Al Janini, M. (2018). The impact of transformational leadership on employees creativity: The mediating role of perceived organizational support: *Management Research Review*, Vol.41, No.1, pp.113-132. <http://dx.doi.org/10.1108/MRR-02-2017-0032>
- Sung, S.Y & Choi, J.N. (2014). Do organizational spend wisely on employess? Effects of training and development investments on learning and innovation in organizations: *Journal of Organizational Behavior*, Vol.35, No.3. pp.393-412. <https://psycnet.apa.org/doi/10.1002/job.1897>
- Suk Bong Choi, Kihwan Kim, S.M. Ebrahim Ullah, & Seung-Wan Kang. (2016). How transformational leadership facilitates innovative behaviour of Korean workers: Examining mediating and moderating processes: *Personnel Review*, Vol.45, No.3, pp. 459-479. <http://dx.doi.org/10.1108/PR-03-2014-0058>
- Thomas W.H.Ng. (2017). Transformastional leadership and performance outcomes: Analyses of multiple mediation pathways: *The Leadership Quarterly*, 28, 385-417. <http://dx.doi.org/10.1016/j.leaqua.2016.11.008>
- Wang, H., Wang, L., & LIU, C. (2018). Employee competitive attitude and competitive behavior promote job crafting and performance: A two component dynamic model: *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2018.02223>

Xiaoyu Guan and Stephen Frenkel. (2019). How perceptions of training impact employee performance evidence from two Chinese manufacturing firms: *Journal Personnel Review*, Vol.48, No.1, pp.163-183, <http://dx.doi.org/10.1108/PR-05-2017-0141>