

The Analysis of the Influence of Organizational Commitment and Learning Perception Towards Employees Performance (A Case Study of PT XYZ'S Employees That Participate in the Training at Padang Learning Unit)

Ahmad Fadli^{1*} Rahmi Fahmy²

1.Student at Master of Management Universitas Andalas, Padang West Sumatera, Indonesia

2.Lecture at Master of Management Universitas Andalas, Padang West Sumatera, Indonesia

Abstract

Since 2016, there has been a reduction trend in the amount of PT XYZ employees that participated in the training at Padang Udiklat, even though PT XYZ is one of the biggest State-owned Enterprise of Indonesia (BUMN). This reduction trend is directly in proportion with the performance value results of the operational unit in Padang Udiklat regional in the last four semesters added with the reduction trend of Organizational Commitment in accordance with the employees' results of Engagement Survey held by The XYZ head office (Holding) in 2017. Based on these, this study aims to determine whether Organizational Commitment and employee's Learning Perception are correlated with and affected Individual Performance. The subject of this study is the BUMN employees who participated in the Training at Education and Training Unit (Udiklat) Padang in the third quarter of 2018. Although, the results showed that Perception Learning and Organizational Commitment are only capable of influencing Individual Performance as much as 32.3%. However, this study showed that both of these variables have a positive correlation and are significant towards PT XYZ employees performance. For further research, it is advised to conduct the research on a larger scope, namely, the employees of PT XYZ (Persero) nationwide and not only the employees of a certain region who participated the training in just one Training Unit.

Keywords: Individual Performance ; Learning Perception ; Organizational Commitment

1. Introductions

According to Ivancevich M. John (2007:85), there are several factors which can influence individual performance which are the power of commitment of each of the individuals, motivation and skills, and the combination of the three is expected to produce extraordinary individual performance. Individual performance results will later determine the results of group performance and organizational performances. For these reasons, individual performance is considered to be important.

But in reality, not all of the employees have high commitment and motivation, profound skills and knowledge and are conformable with work, which could result in individual performance in its full potential. An employee may have extraordinary skills and high knowledge but are not highly committed and motivated towards their workplace and vice versa. This could affect their daily work, in which they are occasionally lacked enthusiasm and work ethic, the result is that the individual performance is not as expected by the organization (Sumarsono, 2004:168).

The power of commitment and the "Learning" factor also play an important role in influencing individual performance (Dehnavi & Heyrani, 2014). Several previous studies found that there is a positive correlation between organization commitment and employee performance. For example, Dr. Hueryren Yeh & Hong (2012) found that there is a positive correlation and influence in organizational commitment power towards the results of individual performance on several companies in Mainland China. Ghorbanpour, Dehnavi & Heyrani (2014) found that organization commitment has a significant positive effect to the employee's performance, where the normative commitment has the strongest effect on the performance average compared to affective commitment and continuous commitment.

A study by Newman. et al (2011) also shows similar results in which they conducted on five multinational companies in China to identify the influence of employee perceptions to training with organizational commitment and turnover as the mediating variable. The results showed a positive correlation between Learning Perception with organizational commitment, where employees who have affective commitment proved to have better performance than those who have continuous and normative commitment. Organizational commitment is the degree of employee's desire to stay as a member in his organization/workplace, to strive to be a part of the organization team and to strive to achieve organizational goals. In other words, organizational commitment is an attitude that reflects on the degree of employee's commitment which can be seen from the employee's quality and quantity of performance output (Luthan, 2006).

XYZ company is one of The BUMN company that has the biggest assets in Indonesia. PT XYZ (LLC) goal is to become a worldclass company. Therefore, related to the development of employee competency, the

company have an Educational and Training Unit called “XYZ Pusdiklat” and is located in Jakarta. XYZ Pusdiklat supervises 2 (two) assessment units and 10 (ten) training units 8 spread throughout Indonesia, One of which is in Lubuk Alung, West Sumatra, which is known as “Udiklat Padang”. This unit is the only Supporting Unit in XYZ Pusdiklat which is responsible for human resource development, specifically for the operational unit located in the central region of Sumatera Island through the implementation of Education and Training. The following tables shows the amount of employees that participated in “learning” to this unit in the last 4 years.

Table 1 . The number of employees who participated in “Learning” in Udiklat Padang

Year	Total
2014	1261
2015	1250
2016	1074
2017	875

Source: XYZ Pusdiklat’s LMS Application

From the table shown above, it can be seen that the number has decreased since 2016. This is due to change of policy from The head office of XYZ company which states that each employee, that previously are allowed to attend 2 training in one year, are now only allowed to attend 1 and must register through the “*Learning Management System*” application owned by the XYZ Training Center. This reduction trend of training participants is in accordance with the reduction trend of organizational performance of PT XYZ (Persero) Business Unit which is located in Padang Region Learning Unit. If we observed the trend of the last 4 semesters, it shows a decrease compared to previous semesters.

Table 2 . NKO Data in Padang Region Learning Unit in the Last 4 Semesters

No.	Operational Unit	Smt 1 2016	Smt 2 2016	Smt 1 2017	Smt 2 2017
1	<i>Sumbar</i> Unit	95.5	93	88.73	88.15
2	<i>Riau & Kepulauan</i> Unit	94	88.3	86.42	83.42

Source: Processed data from *Surat Ketetapan Penetapan NKO* by PT XYZ Board of Directors

Moreover, every year all of the permanent employees in the company are required to fill the employee engagement with the company survey called “*Employee Engagement Survey*” (EES). PT XYZ Head Office conducted this survey to all of its employee in Indonesia through online media in collaboration with The Hay Group consultant. The EES includes measuring several domains regarding the employees engagement with the company such as Leadership Quality, Social Support, Job Satisfaction, Organizational Commitment, Innovative Work Behavior, Organizational Memory, Organizational Identity and Work Engagement. The results of EES survey trend obtained over the past 4 (four) years showed that there are domains that show a reduction trend, i.e. the Organizational Commitment domain, scored 77 (seventy seven) in 2015, and decreased to 73 (seventy three) in 2017.

Based on these facts, the author tries to research further to see whether Learning Perception and Organizational Commitment have an influence on Individual Performance. In addition, the research aims to identify the extent of the domains in each variables can affect the research variables.

2. Literature Review

Performance Theory and Individual Performance

Linda Koopmans and Claire Bernaards (2014), in their journal regarding the methods of developing individual performance measurement, provide their own theory in measuring individual performance. An individual performance can be measured through 4 (four) domains which include Task Performance (the employee’s ability to do their work accordingly), Contextual Performance (positive behaviors shown by the employees which can have a positive effect in supporting their work), Adaptive Performance (an employee’s adaptability related to the type of work performed) and Counterproductive Work Behavior (negative/counterproductive attitude which are contrary to their work and can hamper one’s productivity). Linda Koopmans measured 1181 white collar, blue collar and pink collar workers in Netherlands.

In measuring IWP, there have been a lot of measurement scale developed. However, the scale exhibits several problems. First, current measuring instruments do not measure all of the domains of IWP. As a result, the questionnaires are considered to be inaccurate, especially when measuring the relationship between IWP and individual behavior. Second, questionnaires often use different scales in each domains, this is either because of the difference in concept or in population/target demographic. Third, measuring different domains could show overlapping items (Antithetical Item). Koopmans and his colleagues (2011), in their research regarding the

development of instruments to measure Individual Performance, concluded that IWP can be measured through 4 (four) measurement dimensions:

- A. Task Performance, that is, the capability/ability of an individual to do one's primary work that have been assigned to him, such as performance planning and management capabilities, result orientation, work priority determination and the ability for time and effort utilization at work.
- B. Contextual Performance, that is, the positive behavior which can support the working climate in an organizational environment, such as the strength of commitment and the responsibility to work, collaboration skills and teamwork, communication skills, creativity and work initiative, work methods, open minded culture (open to change and criticism), and paying attention to quality. (Borman and Motowidlo, 1993).
- C. Adaptive Performance, that is, the behavior which reflects a person's ability to adapt accordingly to the demands of one's work, such as the employee concerns in enhancing his skills and work knowledge, work flexibility, the ability to deal with difficult situations, and the ability to adapt related to their work.
- D. Counterproductive Work Behavior, that is, the behavior that is negative and contradictory to the work climate. As the name suggests, this behavior tends to be negative and goes against the work culture and can hamper productivity. This includes off task behavior, complaining, work carelessly, the ignorance regarding the quality and the quantity of work outputs, and a preference for a culture of conflict.

Koopmans and his colleagues (2013) combine the four domains above into an instrument called "the Individual Work Performance Questionnaire" or "IWPQ" for short. The IWPQ has been tested for the general population (workers in all types of occupation) and the result showed no antithetical items. Thus, IWPQ is suitable for measuring individual performance for all types of occupation (white-collar, pink-collar, and blue-collar workers). Indicators used in each of the IWPQ domains are made using Rasch analysis (Rasch, 1960). This analysis offers indepth look into the characteristics scale and has certain values in questionnaire development.

Organizational Commitment Theory

Porter and Steer (1982) defined Organizational Commitment as the relative strength from individual identification with their involvement in a particular organization and can be shown by strong beliefs and acceptance of organizational goals and values. Mowday et al. (1982) added that organizational commitment will be shown by the employee's willingness to work effectively in an organization and have the intention to maintain their relationship without the desire to move into other organization.

Without a doubt, developing organizational commitment is very important for the whole organization, due to the employees pivotal role maintaining success. Allen & Meyer (1990, in Kreitner & Kinicki, 2010) defined organizational commitment as a psychological attitude which binds an employee into an entity. There are three things that influence organizational commitment, which then the employees will decide either to stay or to leave the organization:

a. Affective Commitment

Affective Commitment refers to the employee's emotional engagement, which is the identification and involvement to their organization. Essentially, affective commitment is related to their love for the organization which increases their will to stay and foster social relationships with the organization, due to they becoming a member of the organization (Allen, NJ & Meyer, J. P, 1993). In addition, Each of the affective commitment component has a different basis. Those who have high affective commitment will stay in the organization because of their desire to remain being a part of the organization.

b. Continuous Commitment

Continuous commitment refers to the employee's awareness of the possible losses if the employee left the organization. These losses may include the loss of their current senior position, promotion, or benefits. Employees who have high continuous commitment generally tend to stay in the organization because they need to.

c. Normative Commitment

Normative Commitment refers to the feeling that requires a person to stay in the organization because of their obligations and responsibilities towards the organization based on various considerations such as norms, values and beliefs. Employees with normative commitment will usually feel ought to stay in the organization because they think it is the right thing to do based on their consideration for the norms and values. Therefore, this type of commitment is strongly influenced by the culture, organizational socialization experience. or the benefits received by the employee of said organization.

"Learning Perception" Theory

According to Sikula Munandar (2001), the aim of training and development is to attract and obtain good employees. Whereas According to Noe (2010), training is a planning made by the company to facilitate its employees to learn in accordance to their job competencies. The aim of training is for employees to master the knowledge, skills and behaviors acquired in the training, so that the employees can apply it in their work. For

companies, training can be used to gain competitive advantage, this is because training is not made solely to develop employees' basic knowledge, but also to create company's Intellectual Capital Gain. Meanwhile, Newman et al. (2011) measured training perception and its influence on Organizational Commitment. In this study Newman used measurement domains related to training perception which are:

a. The Availability of Training

One of the determinants for success in training is the trainee's participation in the training. Employees can fully participate if there is access to the training held by the company. Generally, this access to training is only limited to employees with certain classes, positions or tenure. This can be felt to be less profitable for employees who actually need training to fill the gap between their current skills and the skills that they need in their work. The availability of access to training is valuable because if the employees feel they have access for participate in the training, they will not hesitate to register. In addition, opinions regarding access to training has become important. A study by Barlett (2001) shows that the access to training has a significant relationship with the level of employee's affective commitment.

b. Superior Support

Senior coworkers who support the training have been shown to influence a person's participation in training (Noe and Wilk, 1993). Bartlett (2001) research showed a significant relationship between superior support for training and continuous organizational commitment. This finding shows the potential benefit that can be brought from an environment where participation in training and development is strongly encouraged by direct superiors.

c. Coworkers Support for Training

Coworker support for training has a positive influence on employee participation in improving their performance (Noe and Wilk, 1993; Tharenoe, 1997; Bartlett, 2001). This finding shows the potential benefit that can be brought to the organization that creates a culture where coworkers support each other's participation when one of their coworkers is attending a training.

d. Benefits of Training

Ahmad & Bakar (2003) stated that employees who recognize the benefits of training tend to be strongly committed and willing to participate in organizational activities and have better performance results.

e. Motivation to Learn

Employees who have better learning motivation tend to have a positive mindset towards training in the work environment. This has been proven by the greater role of participation of employees who have higher motivation than employees who have lower motivation in training (Mathieu et al., 1992). Empirical research also showed that employees who have a high learning motivation tend to apply the skills they have learned effectively in their work (Canno-Bowers et al., 1993 ; Facticeau et al.,1995).

In this study, the hypotheses will be tested to achieve the research purpose. The framework of this study is as follows :

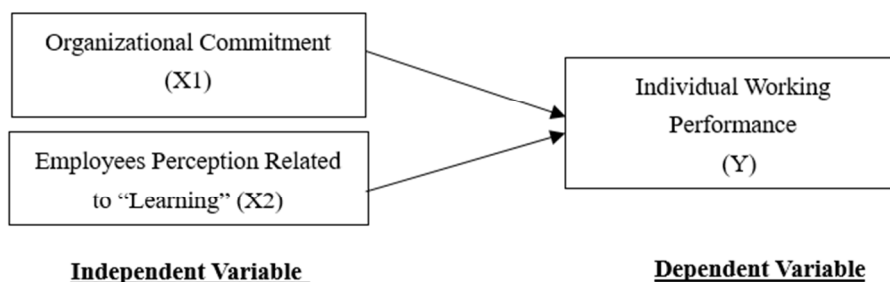


Figure 1 . Conceptual Framework of The Research

The hypotheses for this study are as follow:

- H1: There is an influence and relationship between Organizational Commitment factors and Individual Work Performance.
- H2: There is an influence and relationship between the factors related to the employee's perception on "learning" and Individual Work Performance.

3. Research Method

This study used primary data. The *Sekaran* approach was used to formulate the sample determination from the population. Out of the 179 employees who participated in "Learning" in the Padang Learning Unit in TW3, 122 employees were chosen. A closed statement questionnaires that includes a Likert scale ranging from 1 to 5 was used to gather the data.

Table 3 . Operational Definition of The Research

Variables	Domains	Number of Indicators	Literature
Organizational Commitment	<ul style="list-style-type: none"> Affective Commitment Continuous Commitment Normative Commitment 	<ul style="list-style-type: none"> 8 Indicators 8 Indicators 8 Indicators Likert Scale from 1 to 5	Allen & Meyer, 1991
Learning Perception	<ul style="list-style-type: none"> Availability of Training Colleague Support Superior Support Benefits of Training Learning Motivation 	<ul style="list-style-type: none"> 4 Indicators 6 Indicators 6 Indicators 5 Indicators 3 Indicators Likert Scale from 1 to 5	Newman, et al., 2011
Individual Working Performance	<ul style="list-style-type: none"> Task Performance Contextual Performance Adaptive Performance Counterproductive Work Behavior 	<ul style="list-style-type: none"> 13 Indicators 16 Indicators 8 Indicators 7 Indicators Likert Scale from 1 to 5	Koopmans, 2013

Source: Various Literatures

The collected data will be tested for validity and reliability, as well as testing the structural model with the help of the Smart PLS V2.0 software using the Structural Second Order Construct model approach.

4. Result and Discussion

4.1 Factor Loading Testing

In this study, the Loading Factor value is > 0.5 . This means that if an indicator from the Outer Loading table has a value of < 0.5 , it will be discarded from the research data. While the indicator that has an Outer Loading value of > 0.5 will be retained in the research data. From the 192 initial indicators, 158 indicators remain for this research.

4.2 Reliability and Validity Testing

The following output data shows that all variables have Cronbach's Alpha values of > 0.70 and Average Variance Extracted (AVE) values of > 0.50 . This means that all of the domains and variables fulfill the Internal Consistency testing criteria.

Table 4 . Reliability and Validity Testing

	Cronbach's Alpha	AVE
IWP	0,975370	0,515146
KO	0,957574	0,637970
PL	0,950739	0,585327

Source: Smart Data PLS V2.0 Results

4.3 Structural Model Testing (Inner Model)

The test results show that the IWP variable can be influenced by the two variables (Organizational Commitment and Learning Perception) by 32.3%, while the rest are influenced by other variables outside this study.

Table 5 . R-square Value between Variables

	R Square	R Square Adjusted
IWP	0.323334	0.323

Source: Smart Data PLS V2.0 Results

4.4 Hypotheses Testing

Using the help of the SmartPLS Version 3.0, models were produced with sizes as shown below:

H1: The influence and relationship of Organizational Commitment (OC) and Individual Working Performance (IWP)

The results showed that the Organizational Commitment (OC) variable has a positive and significant relationship towards the Individual Working Performance (IWP) commitment, this is due to the correlation coefficient of The Organizational Commitment (OC) variable of 0.054 (positive correlation), with a value of ($t = 2.704$) > 1.96 , along with a P value = 0.02 which is lower than the minimum requirement P values of 0.05.

H2: The influence and relationship of Learning Perception (LP) and Individual Working Performance.

The results showed that the Learning Perception (LP) variable has a positive and significant relationship towards the Individual Working Performance (IWP) variable, this is due to the value of ($t = 2.492$) > 1.96 , with P Values = 0.01 which is lower than the required P value of 0.05. While the coefficient path value is 0.0273. From the two results of the hypothesis testing above, it can be concluded as the table below:

In order to ensure the structural model testing producing a significant value, the Bootstrapping function is used, and it will be evaluated by using R-Square for dependent constructs. The path coefficient value or t-values of each path are tested to identify the significance between constructs in the structural model, where the R-Square value is a goodness-of-fit model test. Based on the Bootstrapping Output Report from PLS, Structural Model results are as follow:

Table 6 . Results of Path Coefficients (Mean, STDEV, t-values)

	Original Sample (O)	Mean Sample (M)	Standard Deviation (STDEV)	P Values	T-Statistics (O/STERR)
LP -> IWP	0.027357	0.025837	0.010977	0.010977	2.492135
OC -> IWP	0.054372	0.060468	0.020105	0.020105	2.704367

Source: Smart Data PLS V2.0 Results

4.5 Descriptive Statistics of The Research Variables

The following are the descriptive statistical data of this study:

Table 7 . Descriptive Statistics of The “Learning Perception” Variable

Code	Mean Value
Learning Perception Variables	4.261
Availability of Training (AT) Domain	4.215
Coworker Support (CS) Domain	4.180
Superior Support (SS) Domain	4.232
Benefits of Training (BT) Domain	4.304
Learning Motivation (LM) Domain	4.368

Source: Smart Data PLS V2.0 Results

The table above shows that the strongest domain is the Learning Motivation (LM) domain, with a value of 4.368, and the weakest domain is the Coworker Support (CS) domain, with a value of 4.180, While the variable itself has a mean value of 4.261.

Table 8 . Descriptive Statistics of The “Organizational Commitment” Variables

Code	Mean Value
Organizational Commitment Variables	4.205
Affective Commitment (AC) Domain	4.398
Continuity Commitment (CC) Domain	4.096
Normative Commitment (NC) Domain	4.121

Source: Smart Data PLS V2.0 Results

The table above shows that the strongest domain is Affective Commitment (AC) domain, with a value of 4.398, and the weakest domain is the Continuous Commitment (CC) domain, with a value of 4.096, While the

variable itself has a mean value of 4.205.

Table 9 . Descriptive Statistics of The “Individual Working Performance” Variables

Code	Mean Value
Individual Working Performance Variables	4.117
Task Performance (TP) Domain	4.055
Adaptive Performance (AP) Domain	4.060
Contextual Performance (CP) Domain	3.978
Counterproductive Work Behavior (CF) Domain	4.374

Source: Smart Data PLS V2.0 Results

The table above shows that the strongest domain is Counterproductive Work Behavior (CF) domain, with a value of 4.374, and the weakest domain is the Contextual Performance (CP) domain, with a value of 3.978, While the variable itself has a mean value of 4.117.

Table 10 . Hypothesis Testing Results

Hypothesis	Results	Original Value	T Table	P Values	Conclusion
H1 (OC→IWP)	Positive and significant	0.0543	2.704	0.02	Accepted
H1 (LP→IWP)	Positive and significant	0.0273	2.492	0.01	Accepted

Source: Smart Data PLS V2.0 Results

4.6 Conclusions

The results of positive and significant relationship between Organizational Commitment and Individual Performance confirms the first hypothesis, whilst the result of positive and significant relationship between Learning Perception and Individual Performance confirms the second hypothesis. The results of this study indicate the effect of independent variables (Learning Perception and Organizational Commitment) could only influence the dependent variable (Individual Performance) by 32.3%. This signify that Perception Learning and Organizational Commitment do not strongly influence Individual Performance, there are other variables that could influence performance that were not addressed in this study. The results of this study, regarding Individual Work Performance, showed that 99.8% are influenced by Adaptive Performance, Contextual Performance, Task Performance and Counterproductive Performance. While the remaining 0.2% are influenced by other dimensions outside of the boundaries of this research. In addition, Contextual Performance domain is proven to have the biggest influence than other domains and counterproductive performance has the lowest influence.

5. Conclusion

The results of this study indicate that the effect of independent variables (Perception Learning and Organizational Commitment) is only able to influence the dependent variable (Individual Performance) by 32.3%. This means that Perception Learning and Organizational Commitment do not strongly influence Individual Performance variables, there are other variables that can influence the performance of those individuals who were not appointed in this study.

Although Learning Perception and Organizational Commitment can only influence Individual Performance by 32.3%, in order that both of these variables to have an impact on performance, it is necessary for the management to pay attention to several things. Therefore, in order that this research can have implications for policy makers, it is recommended that:

- a. For Learning Perception, the company needs to increase the amount of learning that will directly affects the performance change, using this method tends to increase Learning's influence on the performance and the employee's perception towards the value of learning.
- b. Company management needs to raise awareness of all of the employees to further enhance the company's caring culture in the working environment. Moreover, "Caring" is one of the values held in the company, namely "Trust, Integrity, Care and Learning". This came from the participants' answers which showed that they felt that there is still a lack of concern from the older (senior) coworker in teaching their younger (junior) colleagues who are still lacking experience. Problems can be solved simply by implementing the "Knowledge Sharing" program consistently every week, in order for "Knowledge Transfer" and "Skill Transfer" to happen. If the management has experts / professionals in a particular field / SME (subject matter expert), the alternative can be done by using "Taxid to Explicitd", that is, the method that captures or probes a particular expertise that is owned by an expert and publish it in the form of a book that could be studied by the party of interest. Alternatively, increasing the implementation of "Community of Practice" could be implemented, with diverse COP team members so that when the COP team carried out "Focused

- Group Discussion" could result in the "Transfer of Knowledge" which could form a culture of "Learning" from senior employees to junior employees by itself.
- c. The low mean value of 2 (two) statements in the Normative Commitment domain, specifically the statement "I think nowadays people move very often from one company to another" and the statement "I do not believe that someone has to be loyal to only one organization". This signifies a warning sign for the management, resulted from one of the initial indications of the tendency of other company to hijack the employees who are experts / SMEs . Especially now that IPP (Independent Power Plant) / Private Power Plant is a growing field in Indonesia, Eventhough the company has spent a lot of money in creating experts in their field.

5.1 Limitations and suggestion

The limitations of the authors in this study is cannot obtain data concerning the results of employee performance appraisal for every semester due to the participants differed in their operational units performance in addition that the required data was confidential. The data that the authors obtained is only the Organizational Performance Value that are accumulated in nature as described in the background section of the study. In addition, suggestion for further research are:

- a. The participants should have a longer training period, e.g. participants who have 1 year training and not just in Q3.
- b. The study should be conducted in a larger scale, i.e. nationwide XYZ company employees and not limited to just one region or one training unit, this is because of the results that could be related to the policy that will be used by the company either through holding or as a business unit especially for the XYZ Puskdiklat when designing a "Learning".

References

- Alamri, M. S., & Al-Duhaim, T. I. (2017). Employees Perception of Training and Its Relationship with Organizational Commitment among the Employees Working at Saudi Industrial Development Fund. *International Journal of Business Administration*, 8(2), 25. <https://doi.org/10.5430/ijba.v8n2p25>.
- Alamri, M. S., & Al-Duhaim, T. I. (2017). Employees Perception of Training and Its Relationship with Organizational Commitment among the Employees Working at Saudi Industrial Development Fund. *International Journal of Business Administration*, 8(2), 25. <https://doi.org/10.5430/ijba.v8n2p25>
- Allen, N.J., & Meyer, J.P. 1997. Model of Organizaion Commitment : Measurement Issues. *The Icfai Journal of Organizational Behavioer*, Vol. Vi, No. 4, 2007.
- Allen, N.J., & Meyer, J.P. 1990. The Measurement and Antecedents of Affective, Continuance, and Normative Commitment to Organization. *Journal of Occupational Psychology*, 63, 1–18.
- Allen, N. J. & Meyer, J. P., 1993, Organizational commitment: Evidence of career stage effects? *Journal of Business Research*, 26, 49-61
- Einolander, J. (2015). Evaluating Organizational Commitment in Support of Organizational Leadership. *Procedia Manufacturing*, 3(Ahfe), 668–673. <https://doi.org/10.1016/j.promfg.2015.07.300>
- Jaros, S. (2007). Meyer and Allen Model of Organizational Commitment : Measurement Issues. *The Icfai Journal of Organizational Behavior*, 6(4), 7–26. <https://doi.org/10.1348/096317906X118685>.
- Koopmans, L., Bernaards, C., Hildebrandt, V., Van Buuren, S., Van Der Beek, A. J., & de Vet, H. C. w. (2012). Development of an individual work performance questionnaire. *International Journal of Productivity and Performance Management*, 62(1), 6–28. <https://doi.org/10.1108/17410401311285273>
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., van Buuren, S., van der Beek, A. J., & de Vet, H. C. W. (2014). Improving the Individual Work Performance Questionnaire using Rasch analysis. *Journal of Applied Measurement*, 15(2), 160–175. <https://doi.org/10.1136/oemed-2013-101717.51>
- Koopmans, L. (2014). *Measuring Individual Work Performance*.
- Newman, A., Thanacoody, R., & Hui, W. (2011). The impact of employee perceptions of training on organizational commitment and turnover intentions: A study of multinationals in the Chinese service sector. *International Journal of Human Resource Management*, 22(8), 1765–1787. <https://doi.org/10.1080/09585192.2011.565667>
- Lawrence, S. et al. (2001). Persistence of Web References in Scientific Research. *Computer*. 34, 26-31. doi:10.1109/2.901164, <http://dx.doi.org/10.1109/2.901164>.