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## **Professional Competence and Service Innovation in Higher Education Institutions in Central Java, Indonesia**

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**Suparjo<sup>1</sup>**

**Abstract:**

*This study analyzed the effect of salary satisfaction, work satisfaction, and career development satisfaction on commitment to face changes. Furthermore, this study examined the effect of the commitment to organizational learning, professional competence, service innovation, and organizational performance.*

*The population of this study was 2,216 lecturers in 20 private universities in Central Java, and the taken sample was 220 respondents. The data were analyzed using Structural Equation Model (SEM) with Amos software version 21. The results showed that the models were mostly fit to the data.*

*The salary satisfaction, work satisfaction, and career development satisfaction had a positive and significant effect on organizational performance. In addition, the commitment to face changes, organizational learning, professional competence, and service innovation had a positive and significant effect on organizational performance.*

*However, the career development satisfaction had no effect on commitment to face changes, whereas the organizational learning had no effect on service innovation.*

**Keywords:** *job satisfaction, organizational learning, professional competence, service innovation, organizational performance.*

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## 1. Introduction

Nowadays, business and organizational development is indicated by the rapid changes in customer, technology, and competition (Canning and Hanmer-Lloyd 2007; Lee and Sukoco, 2007). However, the phenomenon of changes has long been a 'fright' on internal environment of organization, especially for employees. Employees are likely to avoid changes, particularly radical changes, because of the uncertainty arisen from the changes (Judge *et al.*, 1999). In fact, if the changes are welcomed by the employees, they are likely to develop individual and organizational performance more effectively (Bercovitz and Feldman, 2008; Burke and Litwin, 1992; Gibson *et al.*, 2002).

To face a change, individual commitment is required in an organization. Armenakis and Bedeian (1999) reveal that the effectiveness of the changes implemented by the organization highly relies on the organizational ability in helping every employee to support the change programs. Herscovitch and Meyer (2002), through the three-component model of commitment of organizational changes, prove that commitment to implement changes becomes a better predictor than organizational commitment, in supporting the changes. If the organization can encourage employees to have a commitment in implementing changes, the implementation is likely to be successful, and organizational performance is likely to be improved (Parish *et al.*, 2008).

One factor considered as the most likely to increase the commitment to implement changes is job satisfaction since it has been proven able to encourage organizational commitment at the highest level (Lok and Crawford, 1999; Mulky, 2012; Suma and Lasha, 2013). Job satisfaction effect on organizational performance has also been frequently studied (Ostroff, 1992). However, the effect of job satisfaction on commitment to implement changes should be investigated further since organizational commitment is proven differently from commitment to implement changes (Herscovitch and Meyer, 2002). Therefore, the main objective of this study is to examine the effect of job satisfaction categorized into salary satisfaction, work satisfaction, and career development satisfaction on commitment to implement changes. Furthermore, this study aims to examine the effect of job satisfaction on organizational performance.

Regarding the organizational performance, there are several studies on the role of the learning process (Anderson and Anderson, 2010; Jordan, 2004), innovation (Hage, 1999; Poole and Van de Ven, 2004), and organizational capability (Jones *et al.*, 2005; Senge *et al.*, 1999). Therefore, this study includes the variables of the learning process, innovation, professional competence, and organizational capability in the research model. The relationship between variables was tested using a path analysis model presented with a comprehensive explanation.

## 2. Literature Review and Hypothesis Development

To maintain continuity, organizations should provide opportunities for employees to achieve success and recognition of the achievement, and thus it increases employee commitment (Curry *et al.*, 1986). One considered factor to influence employee commitment is job satisfaction. Job satisfaction refers to an individual attitude on the work by considering the difference between the amount of earned rewards and the expected amount (Chung *et al.*, 2010; Lee and Chang, 2008). Employee satisfaction can emerge from the organizational support in satisfying the social and emotional needs of employees leading to the rise of positive work behavior (Cullen *et al.*, 2014).

One of the employee expectations in a company is a fair remuneration instigating satisfaction (Boles *et al.*, 2003; Giannikis and Mihail, 2011). In regulating the employee remuneration system, it is important to consider the contribution of employees adequate with the appreciation (reward) (Fisher *et al.*, 2010; Hatch and Dyer, 2004; Iqbal, 2012). As the perceived satisfaction generates positive work behavior (Cullen *et al.*, 2014), fair remuneration is expected to produce employee commitment to face changes. When employees are satisfied with the wages or salaries, it is expected that the employees contribute to every process held by the organization, including facing changes.

Several studies (Judge *et al.*, 2001; Ostroff, 1992; Petty *et al.*, 1984) have revealed that one of the factors affecting the individual and organizational performance is job satisfaction. Reward for recognitions and supports in the form of fair remuneration also influence employee performance (Brun and Dugas, 2008; Mohrman and Lawler, 1991). Increased employee performance is one indicator of the high performance of human resources in the organization with a positive effect on organizational performance (Combs *et al.*, 2006; Sun *et al.*, 2007). It is important to consider the reward system and fair remuneration as a form of human resource management practices of good organizations (Bamberger and Meshoulam, 2000). Through the integration between individual interests and goals with the organization, it is expected to improve organizational performance.

*H1: Salary satisfaction positively affects commitment to implement changes.*

*H2: Salary satisfaction positively affects organizational performance.*

One measurement of job satisfaction in the job descriptive index, in addition to salary, is the work satisfaction (Kinicki *et al.*, 2002). When the characteristic of a job is in accordance with the expectation and the ability of an individual, it has a positive effect on commitment (Hackman and Oldham, 1980; Shah *et al.*, 2012). Employees satisfied with the work are likely to have a strong commitment on the organization (Mathis and Jackson, 2001). When an employee feels comfortable and satisfied with the work, positive behavior can be generated (Cullen *et al.*, 2014) including commitment to face changes.

Synchronizing the required criteria for a job with the capabilities of employees is the duty of human resource management in organization (Bamberger and Mashoulam, 2000). Organization should provide social and emotional support for employees (Cullen *et al.*, 2014) including synchronizing the characteristics of a job with the ability and the expectation of the employees (Combs *et al.*, 2006). If an organization can perform these actions, the organization succeeds in managing human resource practices effectively (Bamberger and Mashoulam, 2000; Sun *et al.*, 2007), and this contributes to organizational performance (Stewart, 1996).

*H3: Work satisfaction positively affects commitment to face changes.*

*H4: Work satisfaction positively affects organizational performance.*

Watson and Rao Korukonda (1994) reveal that the role of education and career development of employees becomes exceptionally necessary for an organization. If employees understand what is expected, and acquire the required support to efficiently and productively contribute to the organization, the understanding of the goal, motivation and self-esteem will increase (Costello, 1994). Organizational assurance in the career development of employees can be an emotional support for employees in the form of work satisfaction. Employees with a positive perception of the career development in the organization are likely to have a high satisfaction and motivation to support the achievement of the established goals (Watson and Rao Korukonda, 1994). Through the satisfaction on the career development, employees are expected to be committed to face organizational changes.

Ensuring the career development of employees is the duty of human resource management in organization (Bamberger and Mashoulam, 2000), as a form of recognition of the organization on the employee contribution (Brun and Dugas, 2008). When employees' achievement is acknowledged, employee's individual performance is likely to rise. A good employee performance is an indicator of the success of human resource management with a positive effect on general organizational performance (Stewart, 1996; Sun *et al.*, 2007).

*H5: Career development satisfaction positively affects commitment to implement changes.*

*H6: Career development satisfaction positively affects organizational performance.*

Fauske and Raybould (2005) state that the function of organizational learning is the antecedent of organizational competence. Sinkula *et al.* (1997) state that organizational learning refers to information gathering process, information distribution, organizational memory, and organizational interpretation as the variables affecting performance. Organizational learning is based on the basic principles of learning, including receiving, collecting, interpreting information, and performing upon the information. The ability of the organization to learn is mostly determined by the ability of the organization concerning information processing, communication, knowledge transfer, coordination between business units,

establishment of trustworthy relationship with customers, and negotiation (Bacharach, 1989; Menor and Roth, 2008). The processes are the evidence of the competence development for organization to learn through repetition and practice.

In facing changes, learning process is considered as a method significantly able to ensure the success of sustainable organizational change (Jordan, 2004). On the other hand, there are four characteristics reflecting organizational learning, including managerial commitment, system perspective, openness, experimentation, knowledge transfer and integration (Hocking *et al.*, 2007; Hopkins and Bilimoria, 2008; Reynolds and White, 2000). If the organization is committed to implement a change, it means that the organization is open to accept new ideas. This is related to the characteristics of the learning process. Based on the explanation, there is an indication of a causal effect, in which a commitment to implement changes also affects organizational learning.

Organizational commitment refers to a psychological construct between organization members and the organization reflecting the partiality and determining an individual decision to continue the membership in the organization (Allen and Meyer, 1993; Robbins, 2005). In facing changes, organization should concern employee commitment since organizational commitment is considered essential representing the employment based on the values and goals of the organization (Morgan and Hunt, 1994). When employees are committed to implement changes, it is expected that employees accept the changes.

Herscovitch and Meyer (2002) find that, in facing changes, an organization needs more employee commitment compared to the general organizational commitment. The highest factor causing a failure in change projects is the individual commitment gap in facing changes (Conner and Peterson, 1982). When an organization succeeds in encouraging employees to be committed to implement changes, the opportunities of organizational success in facing changes are likely to be higher. The organizational success in facing changes will lead to the improvement in organizational performance (Burke and Litwin, 1992).

*H7: Commitment to face changes positively affects organizational learning process.*

*H8: Commitment to face changes positively affects organizational performance.*

Chen (2007) suggests that organizational learning refers to a procedure to correct organizational behavior with the acquired, shared, and used knowledge. Hamel and Prahalad (1990) explain that competence refers to the ability to organize work and to deliver value, including the competence of communication, involvement, and commitment to work within the boundaries of the organization. Competence may refer to an integrated set of knowledge (Grant, 1996), while collecting knowledge needs learning process (Chen, 2007). Human-oriented knowledge management of interactional strategy, organizational learning, system-based knowledge management strategy, and knowledge integration has a significant effect on the knowledge

management capability (Joseph and Roumani 2014; Song *et al.*, 2009), frequently called as professional competence. When the organization succeeds in supporting the learning process, it is expected to create an impact on increasing the professional competence in the organization.

In addition, organizational learning is frequently associated with innovation and the creation of new products (Atuahene *et al.*, 2007; Slater and Narver, 1999). Organizational learning helps organization to analyze the changes in environmental conditions by creating new products and satisfying the needs of growing markets (Farrell, 2000; Ja-Shen Chen *et al.*, 2011; Ramos *et al.*, 2012). Innovation is a method to continuously build and develop an organization through the introduction of new technologies and the application of new services in the organization (Lichtenthaler, 2008). Through an effective organizational learning process, it is expected that the organization is improved in the innovation of developing products in the form of goods or services.

*H9: Organizational learning positively affects professional competence.*

*H10: Organizational learning positively affects service innovation.*

Lado and Wilson (1994) describe the theory of resource-based view utilizing organizational competences including managerial competence in input-process-output to generate a sustainable competitive advantage. Amit and Schoemaker (1993) suggest that the concept of competence is related to the ability of organization to distribute resources and to present coordinated tasks to achieve the goal. A well-integrated professional competence is able to be a source of competitive advantagesince it is valuable, rare inimitable, and non-substitutable (Barney, 1991).

Competence is more than formal qualification per individual, but rather a dynamic interaction between individuals in a group incorporated in a system (Håland, 2006). Company competence has a positive effect on the strategy and the achievement of the complete performance (O'Regan *et al.*, 2004; Guskova *et al.*, 2016; Sazhin and Saraikin, 2016). Through professional competence, it is expected that the organization will be able to improve competitiveness and performance.

*H11: Professional competence positively affects organizational performance.*

There are two types of innovation, including product innovation and process innovation (Eva Heiskanen *et al.*, 2007; Ng Pak, 2004; Ramstad, 2009; Siguaw *et al.*, 2006). Innovation is important to be applied to manufacturing companies and companies or public organizations providing services. The application of innovation in public organizations aims to improve the quality of provided services for users and the society (Walker *et al.*, 2010).

Companies with a pro-innovation culture will encourage the distribution and utilization of information. Several studies show that innovation influences performance (Darroch, 2005; Jansen *et al.*, 2006; Zahra *et al.*, 1988). An organization develops innovation as a response to changes in technology, managerial knowledge, and industrial competition aiming to obtain a unique competence and to improve performance (Damanpour *et al.*, 2009). Through innovation, an organization can more quickly seize opportunities and solve problems. Therefore, the organization can work better, more efficiently and effectively compared to the competitors.

*H12: Service innovation positively affects organizational performance.*

### **3. Research Method**

#### **3.1 Research Design**

This study applied a quantitative approach using the questionnaire survey method. The study was conducted at private universities with a successful implementation of radical changes. The respondents were the permanent lecturers including civil servants of Coordinator of Private Higher Education Institutions Region VI assigned in private universities and foundation lecturers. This study described the perception of private university lecturers regarding salary satisfaction, work satisfaction, career development satisfaction, change commitment, organizational learning, professional competence, service innovation, and performance.

#### **3.2 Sampling**

The number of the population in this study was 2216 lecturers in 20 private universities succeeding in implementing radical changes in Coordinator of Private Higher Education Institutions Region VI, Central Java. The criteria of the successful implementation include first, there have been changes in legal entity, organizational structure, vision, mission and goal, organizational management. Second, the study programs are accredited, and the accreditation is still valid. The sample size was determined as Hair *et al.*, (2010) stated that the size of a representative sample for analysis Structural Equation Modeling (SEM) ranged from 100 to 200. Among 400 distributed questionnaires, 244 questionnaires returned with a response rate of 61%. After the data processing and modification, the number of respondents for the analysis was 220 respondents.

Among 220 respondents, 120 respondents (53.09%) were male, and 100 respondents (46.91%) were female. Respondents with the education level of Doctor were 12 (5.3%), while respondents with the education level of Master were 214 (94.7%). The respondents consisted of 132 lecturers (58.40%), 89 associate professors (39.38%), and 5 professors (2.22%).

### 3.3 Operational Definition and Measurement

In this study, there were eight variables, including salary satisfaction, work satisfaction, career development satisfaction, commitment to implement changes, organizational learning, professional competence, service innovation, and performance. Each indicator was rated using a scale of 1 (strongly disagree) to 7 (strongly agree).

Salary satisfaction variable was measured using five-item questions as stated by Bowling and Hammond (2008). One statement used was 'the salary is compatible with expectation'. The variable of work satisfaction was measured using five-item questions proposed by Lee and Ashforth (1993), Kalbers and Fogarty (1995). One statement used was 'proud of the job'. Career development satisfaction variable was measured using five-item questions used by Yang ((2012), Yagiela and Munson (1997). One statement used was 'happy with the career development'. The variable of commitment to change was measured using five-item questions used by Terziovski (2002). One statement used was 'willingness to support a new order for the change of acceleration'. Organizational learning variable was measured using five-item questions proposed by March *et al.* (1991), Atuahene Gima and Murray (2007). One statement used was 'knowledge improvement to new technology mastery'. Service innovation variable was measured using five-item questions developed by Rutherford *et al.* (2007); Ojasalo (2008); Hurley and Hult (1998). One statement used was 'using the latest infrastructure'. The variable of Professional competence was measured using five-item questions developed by Oly-Ndubisi (2007) and Zwell (2000). One statement used was 'capable in communication and negotiation'. Organizational performance variable was measured using five-item questions referring to Law No 14/2005, Sukirno and Siengthai (2011). One statement used was 'graduate quality improvement'.

## 4. Results and Discussion

The null hypothesis testing was generally used in regression models. The results of the data analysis using AMOS 21.0 software are presented in table 1. The data in table 1 indicated that each variable had the value of the loading factor (coefficient) in the significant level on the standardized estimate of critical ratio, meaning that all indicators were acceptable. Based on standardized regression weight, the mathematical equation was as the following.

- $$\begin{aligned} \text{Commitment to change} &= 0.190 \text{ salary satisfaction} + 0.220 \text{ work satisfaction} + 0.056 \text{ career} \\ &\hspace{15em} \text{development satisfaction} \hspace{10em} (1) \\ \text{Organizational learning} &= 0.176 \text{ commitment to change} \hspace{10em} (2) \\ \text{Professional competence} &= 0.181 \text{ organizational learning} \hspace{10em} (3) \\ \text{Service innovation} &= 0.157 \text{ organizational learning} \hspace{10em} (4) \\ \text{Organizational performance} &= 0.176 \text{ salary satisfaction} + 0.191 \text{ commitment to change} + \\ &\hspace{15em} 0.169 \text{ professional competence} \hspace{10em} (5) \end{aligned}$$



$$\text{Organizational performance} = 0.203 \text{ work satisfaction} + 0.191 \text{ commitment to change} + 0.169 \text{ professional competence} \quad (6)$$

**Table 1.** Variable on Regression Coefficient of Full SEM Model Revision

			Estimate	Standardized Estimate	C.R.	SE	P	Label	Result
Commitment to Change	<---	Salary Satisfaction	.234	.190	2.274	.071	.023	par_29	Sig
Organizational performance	<---	Salary Satisfaction	.268	.176	2.069	.129	.039	par_19	Sig
Commitment to Change	<---	Work Satisfaction	.270	.220	2.576	.095	.010	par_27	Sig
Organizational performance	<---	Work Satisfaction	.308	.203	2.424	.127	.015	par_17	Sig
Commitment to Change	<---	Career Development Satisfaction	.047	.056	.657	.071	.511	par_26	Non. Sig
Organizational Performance	<---	Career Development Satisfaction	.223	.216	2.539	.088	.011	par_16	Sig
Organizational Learning	<---	Commitment to Change	.222	.176	2.108	.105	.035	par_28	Sig
Organizational Performance	<---	Commitment to Change	.236	.191	2.201	.086	.028	par_31	Sig
Professional Competence	<---	Organizational Learning	.169	.181	2.166	.078	.030	par_15	Sig
Service Innovation	<---	Organizational Learning	.162	.157	1.867	.087	.062	par_30	Non. Sig
Organizational Performance	<---	Professional Competence	.178	.169	2.067	.086	.039	par_18	Sig
Organizational Performance	<---	Service Innovation	.214	.226	2.726	.078	.006	par_20	Sig

The statistical testing of hypothesis 1 showed that the parameter estimation value was 0.190 with the standard error of 0.103, critical ratio value of 2.274, and probability of 0.023, meaning that the hypothesis 1 was accepted. This indicates that if employees are satisfied with the salary, they are likely to be committed to face changes. The same variable was tested with the variable of organizational performance and resulted in the parameter estimation value of 0.176, standard error value of 0.129, critical ratio value of 2.069, and probability of 0.039. This meant that hypothesis 2 was accepted. Salary satisfaction positively affects organizational performance by the positive behavior performed by employees in private universities in Central Java.

The testing results showed that hypothesis 3 was accepted, indicated by the parameter estimation value of 0.220, standard error of 0.105, critical ratio value of 2.576, and probability value of 0.010. The results confirm that when employees feel satisfied with the guaranteed work, they are likely to show positive work behavior with a commitment to support the changes. The variable of work satisfaction was tested with the variable of organizational performance and resulted in the parameter estimation value of 0.203, standard error of 0.127, critical ratio value of 2.424, and probability of 0.015, meaning that hypothesis 3 was accepted. This indicates that the work satisfaction can improve the performance of the lecturers at private universities in Central Java. When employees are satisfied with the work, they are likely to show positive work behavior resulting in the organizational performance improvement.

Hypothesis 5 was rejected, indicated by the parameter estimation value of 0.056, standard error of 0.071, critical ratio value of 0.657, and probability of 0.511. This means that the variable of career development satisfaction is unable to increase the commitment of the lecturers at private universities in Central Java to implement changes. Therefore, although the organization ensures employee career development, the employee commitment to implement changes is unlikely to improve. The facts showed that, generally, career development program for lecturers organized by private universities has received a low response from the lecturers. Most lecturers consider that career development programs are ineffective since the programs only consider the work schedule fulfillment. The respondents' answers indicate that the commitment to support new order is not caused by the career development programs and activities, but by other subjects such as the responsibility as a member of the organization. However, the variable of career development satisfaction was proven to positively affect organizational performance with the parameter estimation value of 0.216, standard error of 0.088, critical ratio value of 2.539, and probability of 0.011. This indicates that when employees feel that the career development is guaranteed by the organization, they are likely to show positive work behavior resulting in the organizational performance improvement.

Hypothesis 7 was accepted by the parameter estimation value of 0.176, standard error of 0.105, critical ratio of 2.108, and probability of 0.035. This means that the commitment to face changes can improve the organizational learning of lecturers at private universities in Central Java. In addition, hypothesis 8 was accepted with the parameter estimation value of 0.191, standard error of 0.107, critical ratio of 2.201, and probability of 0.028. This indicates that the commitment to face the changes can improve the performance of the lecturers at private universities in Central Java. The results confirm the statement that when employees are committed to face changes, organizational performance is also increased (Burke and Litwin, 1992).

Statistical test results of the hypothesis 9 showed the parameter estimation value of 0.181, standard error of 0.078, critical ratio of 2.166, and probability of 0,030, meaning that hypothesis 9 was accepted. This indicates that organizational learning is able to enhance the professional competence of the private universities in Central

Java. Hypothesis 10 was rejected with the parameter estimation value of 0.157, standard error of 0.087, critical ratio of 1.867, and probability of 0.062. This means that exploratory learning has no effect in increasing service innovation of the lecturers at private universities in Central Java. This result indicates that the activities performed by the lecturers of private universities to improve the mastery of new technologies including activities of knowledge sharing/exchanging and experiments are unable to encourage the development of new ideas and methods in services, and the adoption of the inspirational learning practices.

Hypothesis 11 was accepted with the parameter estimation value of 0.169, standard error of 0.086, critical ratio of 2.067, and probability of 0.039. This means that professional competence can improve the performance of the lecturers at private universities in Central Java. When an organization has a good professional competence, it is likely to have a positive effect on the performance of the organization. Moreover, the hypothesis 12 was accepted with parameter estimation value of 0.226, standard error of 0.078, critical ratio of 2.726, and probability of 0.006. This indicates that service innovation can improve the performance of the lecturers at private universities in Central Java. When an organization develops innovation in the service, it is likely to positively affect the improvement of organizational performance.

## **5. Conclusion**

The results show a positive effect of job satisfaction on commitment to face changes. The findings indicate that the lecturers satisfied with the salary, and the work are likely to have a high commitment to face changes. In the perception of lecturers, by having a high commitment to face changes, the sustainability and development of the organization in the future are guaranteed since the organization will be able to adjust to the environmental change.

This study reveals that the commitment to face changes has a positive effect on the performance of lecturers, directly or indirectly. The indirect effect is through mediating variable including organizational learning and professional competence. In addition, the results explain that to achieve good performance, a lecturer should have a high commitment to face changes in order to adjust the rapid changes around private universities in Central Java.

This study strengthens the previous study results regarding the effect of service innovation on lecturer performance. Previous studies mostly state that innovation has a positive effect on employee performance (Agarwal et al., 2003), whereas other studies claim that innovation has no significant effect on employee performance (Darroch, 2005). The findings of this study indicate that to improve the performance of lecturers, high job satisfaction is required in the form of salary satisfaction and work satisfaction. These satisfactions can affect the commitment to face changes. Finally, the results of this study indicate that the theory of organizational

commitment in improving organizational performance is possible to be applied in private universities.

This study has some limitations. This study only uses permanent lecturers from private universities succeeding in implementing radical changes. This study is also limited in the province of Central Java, since the answers to the survey instrument reflect the socio-demographic characteristics as country-specific. Future studies are expected to explain the transformation of the commitment to face changes into faculty performance. It is needed to conduct research by dividing the empirical model into several models with respondents from private universities, state universities, and a larger number of samples to improve the accuracy of the research model. In addition, it is recommended to continue this study by examining the effect of job satisfaction on the commitment to face changes by using competitive intensity as a moderating variable.

### References:

- Agarwala, T. 2003. Innovative human resource practices and organizational commitment: An empirical investigation. *Int. J. of Human Resource Management*, 14, 175-197.
- Anderson, D., Anderson, L.A. 2010. *Beyond Change Management: How to Achieve Breakthrough Results Through Conscious Change Leadership*, 2<sup>nd</sup> ed. Market Street, SF: Pfeiffer-Wiley Imprint.
- Atuahene-Gima, K., Murray, J.Y. 2007. Exploratory and exploitative learning in new product development: A social capital perspective on new technology ventures in China. *Journal of International Marketing*, 15(02), 1-29.
- Bercovitz, J., Feldman, M. 2008. Academic entrepreneurs: Organizational change at the individual level. *Organization Science*, 19(1), 69-89.
- Boles, J.S., Wood, J.A. and Johnson, J. 2003. Interrelationships of role conflict, role ambiguity, and work-family conflict with different facets of job satisfaction and the moderating effects of gender. *Journal of Personal Selling & Sales Management*, 23(2), 99-113.
- Bowling, N.A. and Hammond, G.D. 2008. A meta-analytic examination of the construct validity of the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale. *Journal of Vocational Behavior*, 73, 63-77.
- Brun, J.P., Dugas, N. 2008. An analysis of employee recognition: Perspectives on human resources practices. *The International Journal of Human Resource Management*, 19(4), 716-730.
- Canning, L. and Hanmer-Lloyd, S. 2007. Trust in buyer-seller relationships: the challenge of environmental (green) adaptation. *European Journal of Marketing*, 41(9), 1073-1095.
- Chung, K.C., Song, W.J., Kim, H.M., Woolliscroft, O.J., Quint, H.E., Lukacs, W.N. and Gyetko, R.M. 2010. Predictors of job satisfaction among academic faculty members: Do instructional and clinical staff differ? *Medical Education*, 44, 985-995.
- Combs, J., Liu, Y., Hall, A., Ketchen, D. 2006. How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel psychology*, 59(3), 501-528.

- Cullen, K.L., Edwards, B.D., Casper, W.C., Gue, K.R. 2014. Employees' adaptability and perceptions of change-related uncertainty: Implications for perceived organizational support, job satisfaction, and performance. *Journal of Business and Psychology*, 29(2), 269-280.
- Damanpour, F., Walker, R.M., Avellaneda, C.N. 2009. Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations. *Journal of management studies*, 46(4), 650-675.
- Darroch, J. 2005. Knowledge management, innovation and firm performance. *Journal of knowledge management*, 9(3), 101-115.
- Heiskanen, E., Hyvonen, K., Niva, M., Pantzar, M., Timonen, P. and Varjonen, J. 2007. User involvement in radical innovation: are consumers conservative? *European Journal of Innovation Management*, 10(4), 489-509.
- Fauske, J.R. and Raybould, R. 2005. Organizational learning theory in schools. *Journal of Educational Administration*, 43(1), 22-40.
- Fisher, R., Boyle, M.V. and Fulop, L. 2010. How gendered is organizational commitment? The case of academic faculty. *International Journal of Organizational Analysis*, 18(3), 280-294.
- Giannikis, S.K. and Mihail, D.M. 2011. Modelling job satisfaction in low-level jobs: Differences between full-time and part-time employees in the Greek retail sector. *European Management Journal*, 29, 129– 143.
- Guskova, D.N., Vdovin, M.S., Krakovskaya, N.I., Slushkina, Yu.Yu. 2016. The Quality of Education as a Primary Concern of the Sustainable Development. *European Research Studies Journal*, 19(3) Part B, 239-257.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. 2010. *Multivariate data analysis*. London, Prentice Hall.
- Håland, E. and Tjora, A. 2006. Between asset and process: Developing competence by implementing a learning management system. *Human relations*, 59(7), 993-1016.
- Hatch, N.W. and Dyer J.H. 2004. Human Capital and Learning as a Source of Sustainable Competitive Advantage. *Strategic Management Journal*, 25, 1155-1178.
- Hernández, J.G.V. and Noruzi, M.R. 2010. How Intellectual Capital and Learning Organization Can Foster Organizational Competitiveness? *International Journal of Business and Management*, 5(4).
- Hocking, J.B., Brown M. and Harzing A.W. 2007. Balancing Global and Local Strategic Contexts: Expatriate Knowledge Transfer, Applications, and Learning Within a Transnational Organization. *Human Resource Management*, 46(4), 513–533.
- Hopkins, M.M. and Bilimoria, D. 2008. Social and emotional competencies predicting success for male and female executives. *Journal of Management Development*, 27(1), 13-35.
- Iqbal, M. 2012. Impact of Job Satisfaction and Job Control on Organizational Commitment: A Case Study of Air Traffic Controllers of Pakistan Civil Aviation Authority. *Journal of Managerial Sciences*, VI (2), 139-154.
- Jansen, J.J., Van Den Bosch, F.A., Volberda, H.W. 2006. Exploratory innovation, exploitative innovation, and performance: Effects of organizational antecedents and environmental moderators. *Management science*, 52(11), 1661-1674.
- Jones, R.A., Jimmieson, N.L., Griffiths, A. 2005. The impact of organizational culture and reshaping capabilities on change implementation success: The mediating role of readiness for change. *Journal of Management Studies*, 42(2), 361-386.

- Jordan, P.J. 2004. Dealing with organizational change: Can emotional intelligence enhance organizational learning? *International Journal of Organizational Behavior*, 8(1), 456-471.
- Joseph, N. and Roumani, Y. 2014. Understanding the link between organizational learning capability and ERP system usage: An empirical examination. *Computers in Human Behavior*, 33, 224-234.
- Lee, L.T.S., Sukoco, B.M. 2007. The Effects of Entrepreneurial Orientation and Knowledge Management Capability on Organizational Effectiveness in Taiwan: The Moderating Role of Social Capital. *International Journal of Management*, 24(3), 549-620.
- Lee, Y.D. and Chang, H.M. 2008. Relations between Team Work and Innovation in Organizations and the Job Satisfaction of Employees: A Factor Analytic Study. *International Journal of Management*, 25(3), 732-740.
- Madlock, P.E. and Kennedy-Lightsey, C. 2010. The Effects of Supervisor's Verbal Aggressiveness and Mentoring on Their Subordinates. *Journal of Business Communication*, 47(1), 42-62.
- Menor, L.J. and Roth A.V. 2008. New Service Development Competence and Performance: An Empirical Investigation in Retail Banking. *Production and Operating Management* 17(3), 267-284.
- Mulky, A.G. 2012. An Exploration of Salesperson Job Satisfaction in India Using P-Fit Constructs. *Review of Business Research*, 12(5), 65-74.
- Ng Pak, T. 2004. The learning organization and the innovative organization. *Human Systems Management*, 23, 93-100.
- O'Regan, N., Ghobadian, A. 2004. The importance of capabilities for strategic direction and performance. *Management Decision*, 42(2), 292-313.
- Ojasalo, J. 2008. Management of innovation networks: a case study of different approaches. *European Journal of Innovation Management*, 11(1), 51-86.
- Oly Ndubisi, N. 2007. Relationship quality antecedents: the Malaysian retail banking perspective. *International Journal of Quality & Reliability Management*, 24(8), 829-845.
- Poole, M.S., Van de Ven, A.H. 2004. Theories of organizational change and innovation processes. *Handbook of organizational change and innovation*, 374-397.
- Ramstad, E. 2009. Expanding innovation system and policy: An organizational perspective. *Policy Studies*, 30(5), 533-553.
- Robbins, S.P. 2005. Values, attitudes, and job satisfaction. *Organizational Behavior*, 11, 73.
- Rutherford, M.W., Richmond, R. and Holt, D.T. 2007. Corporate entrepreneurship: An empirical look at the innovativeness dimension and its antecedents. *Journal of Organizational Change Management*, 20(3), 429-446.
- Sazhin, V.Y., Saraikin, V.Y. 2016. Social Expectations and Satisfaction with Professional Activity of Pedagogical Personnel of Research University (evidence from the State University of Mordovia). *European Research Studies Journal*, 19(3) Part B, 258-272.
- Shah, M.J., Musawwir-Ur, R., Akhtar, G., Zafar, H. and Riaz, A. 2012. Job Satisfaction and Motivation of Teachers of Public Educational Institutions. *International Journal of Business and Social Science*, 3(8), 271-281.
- Siguaw, J.A., Simpson, P.M. andENZ, C.A. 2006. Conceptualizing Innovation Orientation: A Framework for Study and Integration of Innovation Research. *Product Development & Management Association*, 23, 556-574.
- Song, J.H., Hong Min K. and Kolb, J.A. 2009. The Effect of Learning Organization Culture on the Relationship Between Interpersonal Trust and Organizational Commitment. *Human Resource Development Quarterly*, 20(2), 147-167.

- Sukirno, D.S., Siengthai, S. 2011. Does participative decision-making affect lecturer performance in higher education? *International Journal of Educational Management*, 25(5), 494-508.
- Suma, S., Llesha, J. 2013. Job satisfaction and organizational commitment: The case of Shkodra municipality. *European Scientific Journal*, 9(17).
- Sun, L.Y., Aryee, S., Law, K.S. 2007. High-performance human resource practices, citizenship behavior, and organizational performance: A relational perspective. *Academy of Management Journal*, 50(3), 558-577.
- Suparjo. 2016. *Improving Organizational Performance through Commitment to Radical Change (Empirical Study on Private Universities in Central Java)*. Ph.D Dissertation, Economic Science Program, Universitas Diponegoro.
- Turner, P.J., Cadwallader, S., Busch, P. 2008. Want to, need to, ought to: employee commitment to organizational change. *Journal of Organizational Change Management*, 21(1), 32-52.
- Walker, R.M., Damanpour, F., Devece, C.A. 2010. Management innovation and organizational performance: The mediating effect of performance management. *Journal of Public Administration Research and Theory*.
- Yang, M.L. 2012. Transformational leadership and Taiwanese public relations practitioners' job satisfaction and organizational commitment. *Social Behavior and Personality: An international journal*, 40(1), 31-46.