The Role of Shared Leadership and Work Environment in Strengthening the Influence of Compensation on Nurse’s Performance

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Abstract:

There were many empirical studies proved that Compensation influenced the Nurse’s Performance, however there were only few studies observing Shared Leadership and Work Environment which can strengthen the influence of Compensation on Nurse’s performance.

Therefore, the objectives of the study are to prove that Shared Leadership and Work Environment are the moderating variables of the influence of Compensation on Nurse’s performance. The sample respondents of this study were 139 nurses of Ngudi Waluyo Wlingi Regional Hospital, Blitar, East Java.

This study used WarpPLS program to answer the objectives of the study. The results of this study show that compensation significantly influences the Nurse’s Performance, while Shared Leadership significantly strengthens the influence of Compensation on Nurse’s Performance.

However, there is no evidence found to prove that work environment strengthens the influence of Compensation on Nurse’s Performance. The uniqueness of the study shows that Shared Leadership strengthens the influence of Compensation on Nurse’s Performance as indicated by the coordination indicator led by the leader.

Keywords: Compensation, Shared Leadership, Work Environment, Nurse’s Performance.

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1. Introduction

Selecting a job is not merely based on the compensation that people will get, but sometimes there is something beyond it. As for some nurses, the basic reason of being the nurses might be due to the short distance between their home and the workplace. It means it is not because they will get more salary. This phenomenon is different from the most common reality that more salary people get, more performance they will show. However, this assumption needs to be examined further by conducting a research to disclose whether the compensation influences the nurse’s performance.

The results of previous empirical studies show the inconsistency results of the influence of the compensation on the nurse’s performance. Some researchers found that the compensation positively influence the nurse’s performance, whereas others show that there is no influence of the compensation on the nurse’s performance. These inconsistency results lead to a further research which adds the work environment variable and shared leadership as the moderating variable.

Work environment and shared leadership are selected as the solution to overcome the inconsistency result of the previous studies. In addition, the work environment and shared leadership are still rarely used as the moderating variable of the compensation and performance. Therefore, this study aims at disclosing whether work environment strengthen the influence of compensation on the performance, and also finding out whether the shared indicator strengthen the employee’s performance.

2. Literature, Hypotheses, and Framework

2.1. Compensation and Nurse’s Performance

There are four keys that make the employee compensation management success which are: (1) providing health quality maintenance; (2) maintaining work productivity by keeping the employees working on-track, (3) giving more priority on employee’s satisfaction, (4) controlling the cost (Guzik et al., 1999). According to Gupta and Shaw (2013) that compensation system is important and interesting. Nevertheless, there are some debates on the study concerning employee’s compensation including: (1) compensation becomes one of reasons of the crucial effects on human capital’s quality and effectiveness; (2) based on psychological point of view, compensation has an effect on the employee’s behaviour and attitude; (3) some of compensation’s decision are not expensive.

The development on the compensation study runs dynamically. The influence of the compensation variable, both non-executive and executive, on the performance has positive effects as stated by Feng et al. (2015). Compensation, both performance-based compensation, compensation based on individual performance, and a strong team identity, positively affects the performance (Blazovich, 2013). Shin-Rong et al.
(2012) who state that the compensation made by director economically has a positive effect on the market performance and company support this finding.

A study conducted by Vandersteegen et al. (2014) on 34 OECD developed countries, which has become the members of OECD in between 1970-2001 shows that the compensation decrease the maintenance cost by 0.11%. Meanwhile, another research concerning the influence of the compensation on employee’s performance states that the quality of the compensation is influenced by: (1) the quality of the people who apply, (2) the quality of those hired, (3) the likelihood of job acceptance, (4) the motivation and performance level of the workforce, and (5) the quality of who stays with the company (Gupta and Shaw, 2014).

Brown et al. (2016) state that “We further find that the relation between task difficulty and compensation plan selection is fully mediated by participants’ assessments of their relative skill”. This research used the web-based software in the computer library by involving 148 undergraduate students from public university. Whereas, based on Onishi’s research (2013), he states that the compensation in form of revenue-based compensation plans can increase the patent/copyright numbers.

\[ H_1: \text{Compensation has positive effect on Nurse’s Performance.} \]

2.2. Work Environment

Some characteristics of the work environment are health, basic competition standard, work competency, work policy, and motivation (Tengland, 2011). In addition, there are significant different found between the employees of Japanese Company and Europian Company. The employees of Japanese company show high training evaluation than those from European company (Duignan and Yoshida, 2007).

In addition, Anitha (2014) in her study shows that there is an involvement of the employees (\(r^2, 0.672\)). This involvement is good for the work environment as found in work environment variables, co-workers and team works have a huge influence. Thus, it can be inferred that the involvement of the employees has a significant effect on the employees’ performance (\(r^2, 0.597\)).

Belfield & Marsden (2003) state that the relation between work environment and performance have been found to have strong evidence that monitoring environment structure and work place must be matched to elevate the performance. This finding is supported by Adomako dan Danso (2014) who also disclose that the environmental policy has a negative effect on the company’s performance. However, political relation and environmental dynamics have become the moderating variables of the influence of environmental policy on the company’s performance as shown by the positive and significant relation.
The research result of Akhtar and Fischer (2014) show that supervisory environment (semi-autonomous supervisory) has a strong positive effect on the trust and satisfaction of FCS, and on the warehouse service quality which positively influence the company’s development.

\(H_2\): Work Environment as a moderating variable for the effect of Compensation on Nurse’s Performance.

2.3. Shared Leadership

Pearce et al. (2009) states that “Shared leadership is a dynamic, unfolding, interactive influence process among individuals, where the objective is to lead one another toward the achievement of collective goals. This influence process often involves peer influence and at other times involves upward or downward hierarchical influence.” Meanwhile, Hoch and Dulebohn (2013) affirm that “Shared leadership represents a form of team leadership where the team members, rather than only a single team leader, engage in leadership behaviors”.

Furthermore, it is found that some empirical studies concerning shared leadership are correlated to the culture (Hoch, 2014; Erkutlu, 2012; Fausing, 2015). Therefore, there is no study found to have shared leadership as the moderating variable of the influence of compensation on the performance. Based on these, the third hypothesis of this study is:

\(H_3\): Shared Leadership as a moderating variable for the effect of Compensation on Nurse’s performance.

3. Research Method

Sample Size

The population of this study is nurses of General Hospital "Ngudi Waluyo", Wlingi, Blitar, East Java, Indonesia. The numbers of all the nurses are 312. In this study, the purposive sampling technique was used to define the respondents in which the criterion of the respondent is a nurse who has worked more than 3 (three) years. Therefore, based on this criterion, there were 139 nurses who become the samples of this study.

Data Collection Procedures

The questionnaires which were written in Indonesian had been distributed to 139 nurses. The interview session was also conducted to have further information concerning compensation, work environment, shared leadership, and nurse’s performance which were not stated in the questionnaires.

Data Measurement
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Data were measured by using Ordinal Scale. The measurement scale used was Likert Scale 5 items consisting of:

1. Strongly disagree : 1
2. Agree : 2
3. Neutral : 3
4. Agree : 4
5. Strongly Agree : 5

Data Analysis

Data analysis was conducted by using structural equation model with WarpPLS approach. For the analysis of the moderation variable, it used moderation regression approach by adding the interaction variable between independent variable and moderation variable. The regression moderation model used is as follows:

3.1. Regression model approach

The proposed model in this research is:

\[ Y = \beta_0 + \beta_1X + \beta_2Z_1 + \beta_3Z_2 + \beta_4X^*Z_1 + \beta_5X^*Z_2 + \varepsilon \]

Where:
- \( Y \) = Nurse’s Performance
- \( \beta_0 \) = Intercept
- \( \beta_1, \ldots, \beta_5 \) = Regression Coefficient
- \( X \) = Compensation
- \( Z_1 \) = Work Environment
- \( Z_2 \) = Shared Leadership
- \( X^*Z_1 \) = Interaction of Compensation and Work Environment
- \( X^*Z_2 \) = Interaction of Compensation and Shared Leadership
- \( \varepsilon \) = error

Table 1. Research variables, indicators and Items

| Variable | Indicator | No. | Item |
|----------|-----------|-----|------|
| Compensa-tion | Salary | 1. | The salary I receive from the hospital can elevate my work spirit. |
| | | 2. | The salary I receive is above the regional minimum wage (UMR). |
| | | 3. | The salary I receive can cover my basic needs. |
| | Incentive | 4. | The incentive I receive from the hospital motivates my work spirit. |
| | | 5. | I always receive the incentive every month. |
| | | 6. | The incentive I receive can cover my additional needs besides the basic needs. |
| | Overtime pay | 7. | I receive the overtime pay from the hospital. |
| | | 8. | The overtime pay I receive is suitable with my work result. |
| | | 9. | The overtime pay I receive from my work on the |
| Work Environment | Employee Service | Safety | Comfortable Workplace | Facilities to do the work tasks | Socio-Process | Dynamic | Multidirectional | Collective Activity | Influence | Coordination | Communication |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| national holidays or beyond the normal working hours can increase my work spirit. | The hospital where I work has a vacation program for its employees every year. | The hospital has the vacation program for its employees each year. | The hospital where I work gives recognition to the employees who get achievements. | The hospital where I work gives meal allowance. | The hospital where I work gives recognition to the employees who get achievements. | The hospital where I work gives meal allowance. | The leader of the hospital gives more attention to the employee work place. | The air circulation in my room has met the requirements. | Facilities at my office room are very complete and fit the needs of the room. | Facilities which are available at my office room speed up the service process to the patients. | My leader often socializes with the employees | My leader is able to socialize with local communities. | The hospital leader often socializes his/her work programs while delivering the speeches in the national day celebration. | My leader is happy to make any changes to make things better. | My leader is happy to receive any suggestion from the employees. | My leader is willing to accept and constructive criticism. | My leader persuades the employers to keep updating. | My leader is able to direct the employees in various matters related to health service. | My leader is able to direct the employees related to the health service activities. | My leaders is able to make routine activity plans. | The leader of the hospital and the society do social activities together. | My leader has an influence on the employees’ achievement. | My leader is able to coordinate with the employees. | Every month, the top leader has a coordination meeting with the middle leaders. | My leader has a good communication with the employees. | My leader always communicates to the employees for every decision made. | My leader provides opportunities to the employees to have two ways communication by using the existing
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| Nurse’s Performance | Distribution | Work quality | Work quantity | Work knowledge | Independenc e | Creativity | Team Cooperation | Attendance/ discipline |
|---------------------|--------------|--------------|---------------|----------------|---------------|------------|------------------|------------------------|
|                     | 37. My leader delegates the tasks properly to the employees. | 39. I can accomplish my task with high accuracy. | 42. I can accomplish all the tasks form my leader. | 44. I understand the work guideline to accomplish the job. | 47. I am pleased if there is a freedom in working. | 50. I often give input to solve the problems. | 53. I often work with other employees to finish the job. | 56. I never come late. |
|                     | 38. My leader give a great contribution for the development of the service in the hospital. | 40. I work with pleasure. | 43. My workload can be the source of my stress. | 45. The tasks which are delegated to me are in line with the knowledge i have. | 48. I have been able to finish my job efficiently. | 51. I ask to my co-worker if there are work problems related to other fields. | 54. I am able to coordinate with other division to finish the job. | 57. I alway follow the regulation. |

4. Result and Discussion

4.1. Result

4.1.1. Description of Respondents

Table 2. Description of the Respondent based on Gender, Age, Education, and Marital Status

| Respondent Characteristics | Percentage |
|---------------------------|------------|
| Gender                    |            |
| Men                       | 35%        |
| Women                     | 65%        |
| Age                       |            |
| <30 years old             | 36%        |
| 31-39 years old           | 32%        |
| 40-50 years old           | 27%        |
| >50 years old             | 5%         |
Based on Table 2 above, it can be concluded that the majority of the respondents (65%) is female, aged between 31-39 years old (36%), have Diploma 3 background (64%) and married (79%).

4.1.2. Validity and Reliability test
The validity test shows that all indicators are valid, as all items of indicators have significant probability score < 0.05. Cronbach alpha value of each variable is more than 0.60, indicating that the data is reliable (Table 3).

Table 3. Items, Mean Score, Factor Loading and Cronbach Alpha for Construct Variabels

| Construct          | Item | Mean Score | Factor Loading | Cronbach Alpha |
|--------------------|------|------------|----------------|----------------|
| Compensation       | X1   | 3.98       | 0.527          | 0.855          |
|                    | X2   | 3.60       | 0.428          |                |
|                    | X3   | 3.51       | 0.663          |                |
|                    | X4   | 3.88       | 0.604          |                |
|                    | X5   | 3.97       | 0.538          |                |
|                    | X6   | 3.68       | 0.591          |                |
|                    | X7   | 2.45       | 0.686          |                |
|                    | X8   | 2.43       | 0.613          |                |
|                    | X9   | 2.53       | 0.698          |                |
|                    | X10  | 2.65       | 0.646          |                |
|                    | X11  | 3.06       | 0.655          |                |
|                    | X12  | 3.32       | 0.679          |                |
|                    | X13  | 2.50       | 0.523          |                |
| Nurse’s Performance| Y1   | 3.78       | 0.733          | 0.927          |
|                    | Y2   | 4.14       | 0.680          |                |
|                    | Y3   | 3.96       | 0.719          |                |
|                    | Y4   | 3.84       | 0.789          |                |
|                    | Y5   | 3.07       | 0.120          |                |
|                    | Y6   | 3.87       | 0.580          |                |
|                    | Y7   | 4.04       | 0.745          |                |
|                    | Y8   | 4.04       | 0.730          |                |
|                    | Y9   | 3.66       | 0.241          |                |
|                    | Y10  | 3.81       | 0.614          |                |
## 4.1.3. Regression Analysis

The result of regression analysis for two moderating variables (Work Environment\_Z1; and Shared Leadership\_Z2) is as follow:

| Variable | Value | p-value |
|----------|-------|---------|
| Work Environment | | |
| Z1.1 | 3.86 | 0.675 |
| Z1.2 | 3.83 | 0.752 |
| Z1.3 | 3.58 | 0.791 |
| Z1.4 | 3.58 | 0.797 |
| Z1.5 | 3.41 | 0.840 |
| Z1.6 | 3.56 | 0.838 |
| Shared Leadership | | |
| Z2.1 | 3.61 | 0.781 |
| Z2.2 | 3.60 | 0.824 |
| Z2.3 | 3.60 | 0.772 |
| Z2.4 | 3.73 | 0.751 |
| Z2.5 | 3.65 | 0.859 |
| Z2.6 | 3.63 | 0.869 |
| Z2.7 | 3.84 | 0.846 |
| Z2.8 | 3.77 | 0.841 |
| Z2.9 | 3.76 | 0.840 |
| Z2.10 | 3.59 | 0.820 |
| Z2.11 | 3.65 | 0.628 |
| Z2.12 | 3.66 | 0.765 |
| Z2.13 | 3.71 | 0.840 |
| Z2.14 | 3.63 | 0.758 |
| Z2.15 | 3.90 | 0.744 |
| Z2.16 | 3.70 | 0.758 |
| Z2.17 | 3.71 | 0.769 |
| Z2.18 | 3.82 | 0.782 |
| Z2.19 | 3.71 | 0.759 |
Figure 1. Regression Analysis for Two Moderating Variables

The diagram can be presented in the regression model as follow:

\[ Z_Y = 0.39Z_X - 0.03Z_{X*Z1} + 0.15Z_{X*Z2} \]

\(<.01\) \( (0.36) \) \( (0.04) \)

The R-square value is 0.23, it means that the ability of X (Compensation), X*Z1 (Interaction of Compensation and Work Environment), and X*Z2 (Interaction of Compensation and Shared Leadership) to explain Y (Nurse’s performance) at (23%), while the rest (77%) belongs to other variables which are not used in the model.

4.1.4. Hypothesis testing

**Hypothesis Testing:** Compensation has positive effect on Nurse’s Performance.

| Proposed Hypothesis | Hypothesis | Estimate | p-value | Rejected/Supported |
|---------------------|------------|----------|---------|-------------------|
| Compensation \( X \) → Nurse’s Performance \( Y \) | H1 | 0.39 | <.01 | Supported |

**Hypothesis Testing:** Work Environment as a moderating variable for the effect of Compensation on Nurse’s Performance.

| Proposed Hypothesis | Hypothesis | Estimate | p-value | Rejected/Supported |
|---------------------|------------|----------|---------|-------------------|
| Work Environment as a moderating variable | H2 | 0.03 | 0.36 | Rejected |
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Hypothesis Testing: Shared Leadership as a moderating variable for the effect of Compensation on Nurse’s Performance.

| Proposed Hypothesis | Hypothesis | Estimate | p-value | Rejected/Supported |
|---------------------|------------|----------|---------|--------------------|
| Shared Leadership as a moderating variable for the effect of Compensation → Nurse’s Performance | H3 | 0.15 | 0.04 | Supported |
| X*Z₁ → Y | | | | |

4.2. Discussion

4.2.1. Effect of Compensation on Nurse’s Performance

Regression test shows that compensation has positive and significant influence on the performance of the nurses of Ngudi Waluyo Hospital, Wlingi, Blitar, with probability <0.01. This result supports the research findings conducted by Feng et al., 2015; Blazovich, 2013; and Shin-Rong et al., 2012. Thus, it can be concluded that the higher the salary that nurses get, the better their performance will be.

4.2.2. Work Environment as Moderating Variable

To prove that work environment acts as a moderation variable, the influence of the interaction of compensation (X) and work environment (Z₁) on nurse’s performance can be seen in the regression model. Work environment shows no supporting evidence that it moderates the influence of compensation on nurse’s performance. It is shown by coefficient interaction X and Z₁ which has probability score 0.36 (>0.05). This study result also shows that work environment cannot increase or decrease the influence of compensation on employee’s performance.

This is caused by the low mean value score for the availability of facilities to do the tasks (3.53), comfortable workplace (3.58), and safety (3.85). Another reason is that the competitiveness of the health service industries depend on a high technology (Sakas, 2014), and comfortable workplace (Olson, 1998). Therefore, it can be
inferred that if the hospital uses the old technology and the work environment is unsatisfying, they will decrease the level of competitiveness.

4.2.3. Shared Leadership as Moderating Variable

To prove that shared leadership is moderating variable, the influence of the interaction of compensation (X) and shared leadership (Z2) toward nurse’s performance can be seen in the regression model. Shared leadership shows that there is supporting evidence that it moderates the influence of compensation on nurse’s performance. It is shown by coefficient interaction X and Z2 which has probability (<0.05). This research result also shows that shared leadership can play a role in increasing the influence of compensation on nurse’s performance. Research finding of the study clearly explain Wang et al. (2010) research finding. Based on the finding of the research, they disclose that the interaction of the leadership style and the human resource management strategy significantly contributes to the organizational performance. It can be further explained that shared leadership is a part of leadership style (Horner, 1997), and compensation is a part of human resource management strategy (Miner and Crane, 1995). It is, therefore, research finding of the study supports Wang et al. (2010).

5. Contribution

5.1. Contribution of the study for the science

1) This study adds the validation of compensation influence in health service organization toward the performances of the nurses;

2) This study also proves that the shared leadership becomes the moderating variable of the influence of compensation on the nurse’s performance.

3) This study gives development of idea that work environment and shared leadership are both moderating variables for compensation influence in health service organization toward the work performance of the nurses. Furthermore, this study produces advanced idea of validation that work environment plays a role as independent variable for dependent variable (nurse’s performance), and it is mediating variable of compensation influence on nurse’s performance.

5.2. Contribution of the study for the practice

Based on the research finding, business practitioners in health service business can increase the performance of the employees by using leadership effort to motivate nurses that they are a very important part of health service organization and thus that motivation will increase their ability in nurse’s performance.

5.3. Limitations of Research
This study is limited by sample of the hospital’s nurses which majority has Diploma-3 (D-3), therefore: (1) the study cannot describe the performance achievement of the hospital; (2) different interpretation due to the educational level of the nurses.

6. Conclusions and Suggestions

Conclusion: Compensation in the management of health service has positive and significant influence on the nurse’s performance. There is no supporting proof that work environment is moderating variable of the compensation influence on organization performance in health service public organization. Shared leadership is supported with evidence that it is a moderation variable of compensation influence on organization performances at health service public organization.

Suggestion: For the next research, verification that confirms work environment variable as independent variable of nurse performance, or as mediating variable for the influence of compensation on nurse’s performance needs to be done. For the practitioners of Regency Hospital health service to apply Shared Leadership culture considering that today is a digital era, thus a strong teamwork in activity unit in health service at Public Hospital is needed. For the next research, it is suggested that studies at all activity units in health service at Public Hospital to be able to represent the institution’s performance.

References

Adomako, Albert, Danso Samuel 2014. Regulatory environment, environmental dynamism, political ties, and performance Study of entrepreneurial firms in a developing economy. Journal of Small Business and Enterprise Development, 21(2), 212-230.
Akhtar, Pervaiz, Christian Fischer 2014. Supervision environments and performance of UK dairy warehouses: a path analysis. British Food Journal, 116(6), 1000-1013.
Akhter, Naeem, Muhammad Ijaz, Umer Iqbal Siddiqi, Umair Shouqat, Ali Raza 2016. Impact of Compensation Discrimination on Employees Performance in Engro Food Limited, Alhamd Food Limited and Leader industry Sahiwal of Pakistan. International Review of Management and Business Research, 5(2).
Anitha, J. 2014. Determinants of employee engagement and their impact on employee performance. International Journal of Productivity and Performance Management, 63(3), 308-323.
Belfield, Richard, Marsden David 2003. Performance pay, monitoring environments, and establishment performance. International Journal of Manpower, 24(4), 452-471.
Blazovich, Janell L. 2013, Team identity and performance-based compensation effects on performance. Team Performance Management: An International Journal, 19( 3-4), 153-184.
Brown, Jason L., Sukari Farrington, Geoffrey B. Sprinkle 2016. Biased self-assessments, feedback, and employees' compensation plan choices” Accounting, Organizations and Society, 54, 45-59.
Duignan, René, Yoshida Kosaku 2007. Employee perceptions of recent work environment changes in Japan”, Personnel Review, 36(3), 440-456.
Erkutlu, Hakan 2012. The impact of organizational culture on the relationship between shared leadership and team proactivite. Team Performance Management: An International Journal, 18(1-2), 102-119.

Fausing, Maj Schoeler, Thomas Skriver Joensson, Joshua Lewandowski, Michelle Bligh 2015. Antecedents of shared leadership: empowering leadership and interdependence. Leadership& Organization Development Journal, 36(3), 271-291.

Feng, Mingming Xiao and Abby Wang Jagjit S. Saini 2015. Monetary compensation, workforce oriented corporate social responsibility, and firm performance. American Journal of Business, 30(3), 196-215.

Gupta, Nina, Shaw Jason D. 2014. Employee compensation: The neglected area of HRM research. Human Resource Management Review, 24(1-4).

Guzik, Arlene, MSN, ARNP 1999. Workers' compensation, FMLA, and ADA. AAOHN Journal, 47(6), 261.

Hoch, Julia E. 2014. Shared leadership, diversity, and information sharing in teams. Journal of Managerial Psychology, 29(5), 541-564.

Hoch, Julia E., James H. Dulebohn 2017. Team personality composition, emergent leadership and shared leadership in virtual teams: A theoretical framework. Human Resource Management Review.

Horner, Melissa 1997. Leadership theory: past, present and future. Team Performance Management, 3(4), 270-287.

Miner, John B., Crane, Donald P. 1995. Human Resources Management. second edition. Herper Collins Colle Publishers, New York.

Motley, Robert J., Richard J. Mazzaccaro, David B. Burmeister, Samuel D. Land, Richard M. Boulay, Heiwon Chung, Lynn Deitrick, Andrew D. Sumner 2015. Using focus groups to identify characteristics of an ideal work environment for Advanced Practice Clinicians. Healthcare.

Olson, Eric M, Rachel Cooper, and Stanley F. Slater 1998. Design Strategy and Competitive Advantage. Business Horizons March-April.

Onishi, Koichiro 2013. The effects of compensation plans for employee inventions on R&D productivity: New evidence from Japanese panel data. Research Policy, 42, 367-378.

Pearce, Craig L., Charles C. Manz and Henry P. Sims Jr. 2009. Is Shared Leadership the Key to Team Success? Organizational Dynamics, 38(3), 234-238.

Sakas Damianos, Dimitris Vlachos, Dimitris Nasiopoulos 2014. Modelling strategic management for the development of competitive advantage, based on technology. Journal of Systems and Information Technology, 16(3), 187-209.

Shin-Rong, Shiah-Hou Chin-Wei Cheng 2012. Outside director experience, compensation, and performance. Managerial Finance, 38(10), 914-938.

Tengland, P.A. 2011. The Concept of Work Ability. Journal Occup. Rehabil., 21, 275-285.

Vandersteegen, Tom, Wim Marneffe, Irina Cleemput, Lode Vereeck 2014. The impact of no-fault compensation on health care expenditures: An empirical study of OECD countries. Health Policy.

Wang, Fu-Jin, Shieh Chich-Jen and Tang Mei-Ling 2010. Effect of leadership style on organizational performance as viewed from human resource management strategy. African Journal of Business Management, 4(18), 3924-3936.