

Antecedents of Knowledge Sharing and its Consequences on Job Performance: Evidence from SMEs Sector in Indonesia

¹I. Wayan Edi Arsawan, ²Wayan Gede Supartha, ²IGAK Giantari and ²Gede Riana

¹Department of Management,

²Faculty of Economics and Business, Udayana University, Bali, Indonesia

Abstract: The purpose of this study is to examine and explain the relationship of transformational leadership, job satisfaction and organizational commitment of employees as antecedent knowledge sharing that impact on employee performance. This research uses quantitative design to explain the relationship between variables. Population frame in this study is export-oriented SMEs in the province of Bali which amounted to 69 units with sample frames amounted to 54. Respondents are employees amounted to 177 employees. This research is developed using Structural Equation Model (SEM) PLS. The results of the analysis have found some aspects of the role of transformational leadership, job satisfaction and organizational commitment as antecedent knowledge sharing that were impact on employee performance. Theoretical research contributions have greater notes to the body of knowledge and the role of mediation while managerial implications are the importance of the leader's role in building job satisfaction, organizational commitment and in the building of knowledge sharing and employee performance.

Key words: Antecedents, transformational leadership, job satisfaction, organizational commitment, knowledge sharing, employee performance

INTRODUCTION

Knowledge based view is a new extension of a resource-based view of a company that provides a strong theoretical understanding in support of intellectual capital. The knowledge based view approach builds human capital involvement to produce something unique in building competitive advantage and developing new knowledge faster than competitors (Katic *et al.*, 2012).

Knowledge sharing contributes to building innovation, competitive advantage and intellectual capital (Hooff and Weenen, 2004) improve employee and organizational performance (Ozlen, 2015) ownership and enhancement of intellectual capital contribution to organizational success (Pugna and Boldeanu, 2014; Abdullah *et al.*, 2015; Waheed *et al.*, 2013). Although, considered as an important process in an organization, there is still a debate about its role because it is not yet fully understood, especially, in its application (Nonaka and Takeuchi, 1995) To explore the role of knowledge sharing in order improving employee performance needs to be noticed of influential antecedents in it. As presented in empirical studies that knowledge sharing is influenced by leadership, job satisfaction and organizational commitment.

A study by Bushra *et al.* (2011) investigated the relationship between transformational leadership and job

satisfaction at 133 bank employees in Pakistan and found that transformational leadership had a positive impact on employee job satisfaction. Bass *et al.* (1990) state that managers who use charisma and are able to be inspiration, individual consideration and intellectual motivation and positive reactions to employees in increasing desire and commitment to the organization. Riaz *et al.* (2011) who was found strong positive interactions between transformational leadership and work commitment. From the point of view in general, transformational leadership not only affects job satisfaction but also can determined organizational commitment as extended by the Emery and Barker (2007) study. However, its still remain a contradictory result by Elkordy that states the transformational leadership has no significant effect on job satisfaction and organizational commitment. Transformational leadership has a significant effect on employee performance but the findings of Daud *et al.* (2014) is that transformational leadership has no significant effect on employee performance. A number of studies on job satisfaction that have a significant impact on organizational commitment are undertaken by Qureshi *et al.* (2011) and Malik *et al.* (2010). But the contradictory results of the study were found by Yiing and Zaman (2009) who found job satisfaction negatively affecting the organizational commitment of the education sector in Malaysia.

The results revealed that there is still the first literature gap associated with the conceptualization of research models. Currently, there is no research model that is integrative caused by partial model. The “second” gap lies in the realm of theory. As it is known that knowledge based view is a theory that explores how organizations reward intellectual capital and the important role of ideas/ideas in organizational learning development but it does not explain how the mechanisms that occur in the process of appreciation of the intellectual capital. Given the gap in the realm of theory, it is possible to integrate the theory between knowledge based view and social exchange theory proposed by Blau (1964). The “third” gap is linked to the divergence of empirical studies where research on knowledge sharing is more common in large firms because readiness levels mean there is a greater challenge in applying knowledge sharing practices because in SMEs it is said that knowledge sharing practices are difficult to change has not done much and is considered difficult to measure.

Literature review

Knowledge based view theory: In RBV’s view, performance is the result of the workings of all the resources within the company, the organization’s own and unique capabilities possessed by the company or the performance of all internal resources and fills the opportunities of external corporate challenges (Menguc *et al.*, 2010). The company’s resources are all assets owned by the company both tangible and intangible (Penrose, 1959). Intangible resources can be included in the category of human resources, i.e., managers and employees (Rauch *et al.* 2005), so that, the collaboration of these two resources results in sustainable competitive advantage. The role of knowledge based view is to build the involvement of human capital, so as to enable the company to adapt to various problems with more effective and efficient development of human resources become more dominant and structured. In a knowledge-based view, the company develops important new knowledge to build the competitive advantage of a unique combination of knowledge.

Transformational leadership: According to Bass (1985) transformational leadership is the type of leader who motivates subordinates through inspiration, develops personality, concentrates on invisible quality, values and vision in an effort to build good relationships within the organization, inspires and stimulates employees to expend the best ability to achieve organizational goals (Riaz and Haider, 2010).

Studies conducted by Han *et al.* (2016) stated that the important role of transformational leadership is to increase employee motivation to engage more deeply in work, commitment to the organization and develop capabilities for organizational progress. To measure transformational leadership used 4 dimensions, namely: idealized influence is a dimension that shows the perspective of an employee who thinks that a leader has strength, confidence, belief, consistency and ideas has respect is able to model and keep high standards.

Inspirational motivation is a dimension that shows that a leader is able to understand employees with understanding attitude through inspiration, persuading and motivating. Intellectual stimulation is the ability of leaders to answer employee questions, problem solving and thinking skills about the job in detail and overall responsibility, able to face challenges and help improve the leadership capabilities of each and the organization (Long *et al.*, 2014). Individualized consideration refers to a leader’s ability to understand employees, improve motivation, courage and support employees.

The job satisfaction behavior: Locke (1976) argues that job satisfaction is a happy attitude or positive emotional state as a result of job assessment as well as experience of work. Luthans (2011) says that job satisfaction is the domain of a perception of how well a job is proven through the work itself. Job satisfaction is measured by 5 dimensions:

- Payment system is a compensation system received in connection with the responsibilities and positions obtained (Fu and Deshpande, 2014; Luthans, 2011)
- Promotion is a system of level/career path improvement in Luthans (2011) organization and Neubert (2015)
- Supervision is the ability possessed by superiors in assisting the completion of work (Luthans and Halbesleben, 2011; Long *et al.*, 2014)
- Work it self is the employee’s sense of work, learning opportunities and opportunity to accept responsibility (Luthans, 2011)
- Work condition is the condition and working environment that support Long *et al.* (2014)

Organizational commitment: Jeanette *et al.* (2015) defines organizational commitment as the identification of individual strengths with involvement in any organization such as strengths to beliefs and acceptance of organizational values and goals, feelings for excellence and the desire to nurture feelings as members of the organization. Allen and Meyer (1997) found three

dimensions to measure organizational commitment: normative, continuance and affective commitment. Furthermore, it is said that organizational commitment builds employee loyalty to the organization and maintains positive behavior through work (Karim and Rehman, 2012) as well as ethical values of leaders and perceptions of justice (Fu and Deshpande, 2014).

Jeanette *et al.* (2015) and Luthans (2005) views commitment as an attitude that has multiple definitions and measurements. Commitment is specifically defined as a strong desire to survive as a member of the organization; a desire to achieve organizational goals and assurance of conviction and acceptance of organizational values and goals. The researchers express organizational commitment has three main dimensions of affective, continuance and normative (Jeanette, 2015; Allen and Meyer, 1997; Luthans, 2005). Dimensions and indicators are compiled as follows:

- Affective is a dimension that refers to the employee's emotional state, identification and involvement in the organization
- Continuance is a dimension that refers to the sensitivity to the costs incurred when leaving the organization
- Normative is a dimension that refers to the reflection of feelings as employees

Knowledge sharing: Knowledge is a very fundamental thing in the organization because knowledge has a very strong relationship with the success of the organization (Nonaka and Takeuchi, 1995). Knowledge sharing is the process of transferring skills and abilities among employees (Lin, 2007).

Meanwhile, Pugna and Boldeanu (2014) suggest exchanging knowledge capital among people in order to improve employee performance and improve organizational benefits and performance. This implies that knowledge sharing is the largest resource for organizations to improve performance and gain sustainable competitive advantage (Lin, 2007; Wang and Noe, 2010). Knowledge is very important as one of the key resources in facing challenges (Masa'deh *et al.*, 2016).

Penelitian this combines the SECI Model (Nonaka and Takeuchi (1995) and IoT Model (Lin, 2007) can then be compiled as follows.

Socialization is the process of sharing knowledge between one person and another in the organization, through the creation of a skill model. Externalisation is how to transform the latent knowledge into the knowledge that can be seen in the organization. In this case this dimension refers to how the individual processes in the group.

Combination is the process of forming a new form of knowledge by combining two existing sources of knowledge. Internalisation is the process of altering visible knowledge (explicit) into invisible knowledge (tacit). Individual factors is an attitude of employees who are willing to help other employees and employees who have knowledge self efficacy.

Organizational factors namely the existence of management support in the process of sharing and transfer of knowledge and rewards for employees who practice sharing knowledge. Technology factors ie information and communication technology used.

Employee performance: Employee performance has been studied in industrial and organizational psychology especially in relation to the workplace (Abdullah *et al.*, 2015). For organizations capable of managing human resources and able to optimize the ability of human resources will produce employees who have high performance, so that, it has implications on the achievement of organizational goals. Dimensions and indicators of various researchers vary but generally there are two important things in it that are qualities that refer to the quality of employee work and the quantity that refers to the amount of work within a certain period. From the existing literature search then the dimensions and indicators of employee performance seen that some researchers use the dimensions and indicators of employee performance and compiled as follows.

Quantity of work is the quantity of goods produced is conformity with the target that has been determined. Quality of work is the quality of goods in accordance with applicable quality standards.

Timeliness is that the ordered product can be completed and delivered on time. Job knowledge is an understanding and knowledge of employees about products made in terms of materials, benefits, added value, specificity and differences with competitors.

Cooperative is the character of employees who are able to work together in teams and build good communication during the process of goods. Personal qualities are the values of the personality, integrity of employees and the hospitality of the employees. Initiative and creativeness is the passion to carry out new tasks, ideas and actions to solve problems that arise as part of the process.

Research hypothesis: The study of the direct relationship of transformational leadership to job satisfaction is presented by Belias and Koustelios (2014) who found that transformational leadership has a significant effect on job satisfaction. Fernandes and Awamleh (2014) also found that transformational leadership had a significant effect on

job satisfaction in line with the results of the study by Peachey *et al.* (2014), Shurbagi (2014), Yucel (2012), Yang *et al.* (2011), Emery and Barker (2007), so that, the hypothesis can be formulated as follows:

- H₁: transformational leadership has a significant positive effect on job satisfaction

Studies showing transformational leadership relationships with organizational commitment have been undertaken by Yang *et al.* (2011), Elkhordy (2013), Gumusluoglu *et al.* (2013) and Peachey *et al.* (2014) with the identical result that transformational leadership has a significant effect on organizational commitment. Emery and Barker (2007) find a positive relationship between transformational leadership and organizational commitment where building leadership development leads to effective transformational leadership. The study by Jeanette (2015) found that transformational leadership dimension has significant effect on organizational commitment of employees, so that, hypothesis can be formulated as follows:

- H₂: transformational leadership has a significant positive effect on organizational commitment of employees

The relationship of transformational leadership with knowledge sharing is presented by Carmeli *et al.* (2011) who found that transformational leadership positively affects the behavior of knowledge sharing within organizations, especially, among employees. Huang *et al.* (2008) found that leaders build trust in sharing information and knowledge through interaction. Bradshaw *et al.* (2015) who found a positive relationship between transformational leadership and knowledge sharing through the SECI Model (Socialization, externalization, combination and internalisation), so that, the following hypothesis can be formulated.

- H₃: transformational leadership has a significant positive effect on knowledge sharing

The relationship of transformational leadership and employee performance is presented in a study conducted by Caillier who found a significant positive relationship between transformational leadership and employee performance. Obeidat *et al.* (2015) found that transformational leadership directly affects employee performance. These findings confirm previous studies conducted by Locke (1997), Bass and Avolio (1993),

Senthamil and Palanichamy (2011) who say that transformational leadership can predict employee performance, good leader then employee performance is also good:

- H₄: transformational leadership has a significant positive effect on employee performance

Research showing the relationship between job satisfaction and knowledge sharing was done by Suliman and Al-Hosani (2014) who found a significant direct relationship, then Horvat *et al.* (2015) concluded that knowledge sharing practices are the result of employee job satisfaction making employees willing to share knowledge of other employees. Other studies conducted by Abdullah *et al.* (2015) found that there is a direct link between job satisfaction and knowledge-sharing practices between Malaysian academics. So that can be formulated hypothesis as follows:

- H₅: job satisfaction has a significant positive effect on knowledge sharing

Research showing the relationship between organizational commitment and knowledge sharing has been done by Demirel and Goc (2013) who found that organizational commitment, especially, affective commitment has a strong contribution to the behavior of knowledge sharing within the organization. Furthermore, based on the results of the study, the organization is expected to utilize internal resources more effectively, increase and protect the intellectual capital in the organization and bring the knowledge of each individual into the organization, so, it can be formulated hypothesis as follows:

- H₆: organizational commitment has a significant positive effect on knowledge sharing

Akram and Bokhari (2011) mentioned that knowledge sharing starts from motivation and willingness, so as to improve performance. Ozlen (2015) states that knowledge sharing has a significant effect on the performance of individuals and then in organizations where to build knowledge sharing needs to create a conducive environment, so that, employees have a sense of belonging and sense of responsibility to the personal performance and performance of colleagues. Wang and Wang say that knowledge sharing has a positive direct relationship with employee performance. In line

with the results of the study Obeidat *et al.* (2015) also found a positive and significant relationship between knowledge sharing and employee performance, so, it can be formulated hypothesis as follows:

- H₇: knowledge sharing has a significant positive effect on employee performance

Research that connects between job satisfaction and employee performance has been done by several researchers with varying results. Empirical study by Funmilola *et al.* (2013) says that the dimensions of job satisfaction (pay, supervision, promotion, work it self and work condition) contribute positively significant to employee performance.

- H₈: job satisfaction has a significant positive effect on employee performance

Empirical studies conducted by Rizal *et al.* who found that organizational commitment has a significant effect on employee performance, so that, hypothesis can be formulated as follows.

- H₉: organizational commitment has a significant positive effect on employee performance

Based on the theory of social exchange (Blau, 1964), when an employee is satisfied with his or her working life, the employee will exhibit behaviors that support the organization's goals. This is because satisfied employees will give their dedication and favorable behavior to the organization. Liang *et al.* (2011) states that job satisfaction mediates the relationship of leadership behaviors (transformational and transactional) with employee performance. This study also concluded that leadership is a variable that has a critical position (critical position) because it plays a role in creating job satisfaction while providing direction in achieving employee performance. Based on the description above it can be hypothesized as follows:

- H₁₀: job satisfaction mediates the relationship between transformational leadership and employee performance

A study by Yeh and Hong (2012) found that organizational commitment mediates the relationship between transformational leadership and the performance of Taiwanese employees in China. It implies that organizational commitment variables strengthen the relationship between transformational leadership and employee performance. Based on the description above it can be hypothesized as follows:

- H₁₁: organizational commitment mediates the relationship between transformational leadership and employee performance

MATERIALS AND METHODS

Population and sample research: The number of population frames is 69 units and the sample frame is calculated using Krejcie and Morgan formula, i.e., 59 SMEs. Respondents in this study are employees of SMEs. This research is used simple random sampling methods and based on lottery sampling procedure without recovery as a consequently that every member of the population has the same chance to be a one-time sample. In this case, the sampling procedure meet respondents from 59 SMEs sought each 3 respondents to be asked to fill out the research questionnaire. The total number of respondents (employees) is 177 people as the unit of analysis of this study. All the research is organized to be located in Bali Region, Indonesia.

RESULTS AND DISCUSSION

Evaluation of measurement model (Outer model): Based on the concept of reliability measurement, this research uses three methods of measuring instrument that is convergent and discriminant validity of indicator and composite reliability for block indicator.

Convergent validity: Convergent validity is used to measure the indicator's validity as a measure of a construct that can be shown by the value of the outer loading factor. In a study that is in the early stages of measurement scale development or called exploratory research value loading factor 0.50-0.60 is still considered enough (Chin, 2010). In this research, use outer value of loading above 0.60.

Discriminant validity: Discriminant validity test to measure the validity of an indicator in a variable can be done by another method that is to compare square root coefficient of variance extracted (\sqrt{AVE}) of each latent variable with correlation coefficient among other latent variables in the model. The recommended AVE value is >0.50 (Ghozali and Latan, 2015).

AVE root values for transformational leadership variables of 0.830 greater than the correlation coefficient between transformational leadership variables with other variables namely 0.708, 0.643, 0.691 and 0.760. AVE root value of job satisfaction variable is 0.885 greater than the correlation coefficient between job satisfaction variables with other variables namely 0.857, 0.705 and 0.644. AVE

Table 1: AVE value, AVE root and latent variable coefficients

| Variables | AVE | $\sqrt{\text{AVE}}$ | Correlation coefficients | | | | |
|-----------------------------|-------|---------------------|--------------------------|-------|-------|-------|-------|
| | | | KT | KK | KO | KS | K |
| Transformational leadership | 0.689 | 0.830 | 1.000 | | | | |
| Job satisfaction | 0.783 | 0.885 | 0.708 | 1.000 | | | |
| Organizational commitment | 0.896 | 0.945 | 0.643 | 0.857 | 1.000 | | |
| Knowledge sharing | 0.893 | 0.944 | 0.691 | 0.705 | 0.738 | 1.000 | |
| Employee performance | 0.878 | 0.937 | 0.760 | 0.764 | 0.644 | 0.844 | 1.000 |

Table 2: Instrument reliability test results

| Variables | Cronbach's alpha | rho A | Composite reliability | Average Variance Extracted (AVE) |
|------------------|------------------|-------|-----------------------|----------------------------------|
| X | | 1.000 | | |
| X ₁ | 0.835 | 0.885 | 0.882 | 0.602 |
| X ₂ | 0.872 | 0.885 | 0.914 | 0.728 |
| X ₃ | 0.828 | 0.858 | 0.885 | 0.661 |
| X ₄ | 0.897 | 0.900 | 0.929 | 0.768 |
| Y _{1.1} | 0.971 | 0.971 | 0.981 | 0.945 |
| Y _{1.2} | 0.855 | 0.888 | 0.910 | 0.772 |
| Y _{1.3} | 0.754 | 0.933 | 0.817 | 0.599 |
| Y _{1.4} | 0.941 | 0.942 | 0.962 | 0.895 |
| Y _{1.5} | 0.791 | 0.840 | 0.877 | 0.705 |
| Y _{2.1} | 0.919 | 0.919 | 0.949 | 0.860 |
| Y _{2.2} | 0.927 | 0.934 | 0.953 | 0.872 |
| Y _{2.3} | 0.978 | 0.978 | 0.985 | 0.957 |
| Y _{3.1} | 0.909 | 0.909 | 0.957 | 0.917 |
| Y _{3.2} | 0.907 | 0.911 | 0.955 | 0.914 |
| Y _{3.3} | 0.813 | 0.817 | 0.914 | 0.842 |
| Y _{3.4} | 0.959 | 0.961 | 0.980 | 0.961 |
| Y _{3.5} | 0.944 | 0.945 | 0.973 | 0.947 |
| Y _{3.6} | 0.901 | 0.915 | 0.952 | 0.909 |
| Y _{3.7} | 0.716 | 0.956 | 0.864 | 0.762 |
| Y _{4.1} | 0.710 | 0.740 | 0.872 | 0.773 |
| Y _{4.2} | 0.927 | 0.927 | 0.965 | 0.932 |
| Y _{4.3} | 0.827 | 0.838 | 0.920 | 0.852 |
| Y _{4.4} | 0.886 | 0.887 | 0.946 | 0.898 |
| Y _{4.5} | 0.881 | 0.883 | 0.944 | 0.894 |
| Y _{4.6} | 0.880 | 0.883 | 0.943 | 0.893 |
| Y _{4.7} | 0.952 | 0.959 | 0.969 | 0.912 |

root value of organizational commitment variable of employees is 0.945 bigger than correlation coefficient between organizational commitment variable of employee with other variable that is 0.738 and 0.644 whereas AVE root value of knowledge sharing variable is 0.944 bigger than correlation coefficient between knowledge sharing variable with other variable that is 0.844. This indicates that the indicators reflecting the variable dimensions in this study have good discriminant validity (Table 1).

Composite reliability: Composite reliability is a measurement of the reliability value between indicators of the variables that make it. The results of testing indicator is said to be reliable if the composite reliability and Cronbach alpha has a value >0.70 (Table 2).

The composite reliability value calculation results range from 0.864-0.985 (>0.70) which reflects the variable dimension is reliable. Similarly, the value of Cronbach alpha shows values ranging from 0.710-0.978 (>0.70) then the indicators are reliable, so, it can be declared free of random error (MacKenzie *et al.*, 2011; Singleton and Straits, 2010).

Table 3: Spreading value R² and R² Adjusted

| Latent variables | R ² | R ² adjusted |
|---|----------------|-------------------------|
| Job satisfaction (Y ₁) | 0.712 | 0.710 |
| Organizational commitment (Y ₂) | 0.776 | 0.774 |
| Knowledge sharing (Y ₃) | 0.751 | 0.746 |
| Employee performance (Y ₄) | 0.824 | 0.819 |
| Average | 0.766 | 0.762 |

Evaluation of structural model: Testing of research hypothesis is done using the initial evaluation of R² as the representation of model feasibility test. Second, the research model also evaluated by using predict relevance methods of Stone Geiser (Stone, 1974; Geisser, 1971) and Goodness of Fit (GoF) as recommended by Tenenhouse.

The calculations of Q² and GoF based on R² approached. R² indicates the weakness of the relation/information caused by the exogenous variable to the endogenous variable, so that, R² can show the weakness of a research model. According to Chin (2010) the value of R² of 0.67 is quite strong, 0.33 classified moderate and 0.19 are classified as weak models (Table 3).

Based on the above table the value of job satisfaction R² of 0.712, organizational commitment of employees of 0.776, knowledge sharing of 0.751 and employee performance of 0.824 and the value of R² is classified as a strong model because it is above 0.67. The mean value of 0.766 this means that the model of the relationship between constructs is described at 76.6% while the remaining 23.4% is explained by other variations outside the model. The distribution of R² adjusted values less than the distribution of R² values means the change or extension of the research model by including other latent variables is still possible (Hair *et al.*, 2010).

The Q² predictive relevance: Q² predictive relevance (Q²) is measuring how well the observations generated by the model. Q² has a range of values ranging from 0-1. The closer to 1 means the model has a better predicting ability (Stone, 1974; Geisser, 1971). The value of Q² is calculated by the formula:

$$Q^2 = 1 - [(1 - R^2 y_1) (1 - R^2 y_2) (1 - R^2 y_3) (1 - R^2 y_4)]$$

$$Q^2 = 1 - [(1 - 0.712) (1 - 0.776) (1 - 0.751) (1 - 0.824)]$$

$$Q^2 = 1 - [(0.288) (0.244) (0.249) (0.176)]$$

$$Q^2 = 1 - 0.0031$$

$$Q^2 = 0.9969 \text{ (Q}^2 \text{ predictive relevance is very good)}$$

Table 4: Results of Cohen size effect analysis

| Construct | Original sample (O) | Sample Mean (M) | SD (STDEV) | t-statistics (O/STDEV) | p-values |
|-------------------|---------------------|-----------------|------------|------------------------|----------|
| X->Y ₂ | 0.188 | 0.208 | 0.104 | 1.810 | 0.071 |
| X->Y ₄ | 0.103 | 0.133 | 0.087 | 1.181 | 0.238 |
| Average | 0.145 | | | | |

Table 5: Direct influence transformational leadership, job satisfaction, organizational commitment, knowledge sharing and employee performance

| Construct | Original sample | Sample mean | SD (STDEV) | t-statistics (O/STDEV) | p-values | Information |
|---------------------------------|-----------------|-------------|------------|------------------------|----------|-------------|
| X->Y ₁ | 0.844 | 0.853 | 0.022 | 38.151 | 0.000 | Support |
| X->Y ₂ | 0.382 | 0.394 | 0.088 | 4.351 | 0.000 | Support |
| X->Y ₃ | 0.876 | 0.906 | 0.067 | 12.975 | 0.000 | Support |
| X->Y ₄ | 0.361 | 0.392 | 0.131 | 2.763 | 0.006 | Support |
| Y ₁ ->Y ₃ | 0.153 | 0.158 | 0.082 | 1.863 | 0.063 | Not support |
| Y ₁ ->Y ₄ | 0.474 | 0.467 | 0.081 | 5.836 | 0.000 | Support |
| Y ₂ ->Y ₃ | 0.139 | 0.116 | 0.079 | 1.759 | 0.079 | Not support |
| Y ₂ ->Y ₄ | 0.459 | 0.455 | 0.090 | 5.104 | 0.000 | Support |
| Y ₃ ->Y ₄ | 0.536 | 0.511 | 0.092 | 5.817 | 0.000 | Support |

The calculation results Q^2 shows the value of 0.99, 69 which means the model shows a very good observation that is 99.69% relationship between variables can be explained by the model while the remaining 0.31% is a factor of error or other factors not included in the research model.

Goodness of Fit (GoF): Goodness of Fit (GoF) is used to validate the model as a whole because it is a single measure of the measurement model and structural model:

$$\begin{aligned}
 \text{GoF} &= \sqrt{\text{com} \times R^2} \\
 &= \sqrt{0.683 \times 0.766} \\
 &= \sqrt{0.723} \\
 &= 0.850
 \end{aligned}$$

The GoF calculation results show a value of 0.850 approaching 1 means including a very fit predictive model, indicating that the overall measurement accuracy of the model is excellent. This is based on the criteria of GoF values according to Ghazali and Latan (2015), among others, 0.10 (GoF small), 0.25 (GoF moderat) and 0.36 (GoF large), so, the research model is categorized as GoF large.

Test result effect size: The effect size (F^2) test aims to provide more detailed information about the variation of values that can be explained by a group of independent variables to the dependent variable in a structural equation system (Cohen, 1988). The effect size (F^2) criterion is 0.02-0.15 (weak impact), 0.15-0.35 (medium impact) and >0.35 (strong impact). If the value of F^2 is in the range of 0.02 then the research model is said to be relatively weak, the F^2 value in the range of 0.15 is stated to have a moderate effect and the F^2 value in the range of 0.35 or more is classified as strong effect (Chin, 2010) (Table 4).

The results of the analysis as shown in the above table with the average of 0.145 can be concluded that

there is an indication that the formation of mediation relationship pattern will be established in this study.

Hypothesis testing research: Hypothesis testing in this study is done through two stages of testing the direct influence and testing the indirect effect of exogenous variables on endogenous variables (Table 5).

The results of the analysis provide information that the relationship of transformational leadership to job satisfaction of 0.844 with t-statistic 38.151>1.96 which means significant positive and hypothesis 1 accepted. Transformational leadership relationship to organizational commitment is 0.382 with t-statistic 4.351>1.96 which means a significant positive that hypothesis 2 is accepted. The relationship of transformational leadership to knowledge sharing is equal to 0.876 with t-statistic 12.975>1.96 meaning significant positive, so that, hypothesis 3 accepted. The relationship of transformational leadership to performance is 0.361 with t-statistic 2.763>1.96 meaning significant positive, so that, hypothesis 4 accepted. Job satisfaction has no significant positive effect on knowledge sharing is shown with coefficient of 0.153 with t-statistic 1.863<1.96 which means positive not significant that hypothesis 5 is rejected.

Meanwhile the relationship of organizational commitment of employees to knowledge sharing is 0.139 with t-statistic 1.759>1.96 which means positive not significant, so, hypothesis 6 is rejected. Knowledge sharing has a significant positive effect on employee performance shown by coefficient 0.536 with t-statistic 5.817>1.96 hypothesis 7 accepted. Relationship of job satisfaction on employee performance is shown by coefficient of 0.474 with t-statistic 5.836>1.96 which mean positive significant, so that, hypothesis 8 accepted. Organizational commitment has a significant positive effect on employee performance where the value of path coefficient shown is 0.459 with t-statistic 5.104>1.96 meaning significant positive and hypothesis 9 accepted (Fig. 1).

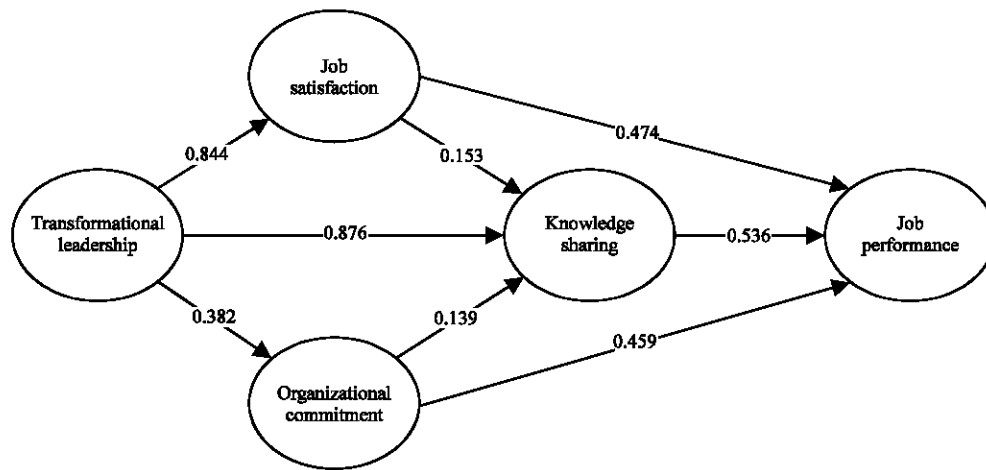


Fig. 1: Research model

Table 6: Indirect linkages variables transformational leadership, job satisfaction, organizational commitment and knowledge sharing on employee performance

| No. | Model* | Path coefficient | t-statistics | t-table | Informations |
|-----|--------|------------------|--------------|---------|---|
| a | KT-KK | 0.844 | 38.151 | >1.96 | a, b significant; c significant but the value of the direct coefficient $c < b$ = partial mediation |
| b | KK-K | 0.474 | 5.836 | >1.96 | |
| c | KT-K | 0.361 | 2.763 | >1.96 | |
| a | KT-KO | 0.382 | 4.351 | >1.96 | a, b significant; c significant but the value of the direct coefficient $c < b$ = partial mediation |
| b | KO-K | 0.459 | 5.104 | >1.96 | |
| c | KT-K | 0.361 | 2.763 | >1.96 | |

The direct influence of transformational leadership on job satisfaction with coefficient value of 0.844 with t-statistic is 38.151 > 1.96 which means significant (a). The effect of job satisfaction on employee performance with coefficient value of 0.474 with t-statistic is 5.836 > 1.96 meaning significant (b). The direct influence of transformational leadership on employee performance with coefficient value of 0.361 with t-statistic is 2.763 > 1.96 meaning significant (c). Hair *et al.* (2010) suggests that if all have a direct and significant influence but the coefficient value c (0.361) is smaller than the coefficient value b (0.474) then it means partial mediation and hypothesis 10 accepted (Table 6).

The effect of transformational leadership on organizational commitment with coefficient value of 0.382 with t-statistic is 4.351 > 1.96 which means significant (a). The effect of organizational commitment on employee performance with coefficient value of 0.459 with t-statistic is 5.104 > 1.96 meaning significant (b). The effect of transformational leadership on employee performance with coefficient value of 0.361 with t-statistic is 2.763 > 1.96 meaning significant (c) which means mediate partially, so that, hypothesis 11 accepted.

The influence of transformational leadership on job satisfaction: The result of the analysis shows that the influence of transformational leadership on employee job satisfaction is positive significantly, the higher the

implementation of the transformational dimension of transformational leadership that will increase the job satisfaction of the employees. The result of research is in line with result of research of Belias and Koustelios that transformational leadership have a significant effect on job satisfaction. A positive, linear relationship and a strong relationship between transformational leadership and job satisfaction was found by Fernandes and Awamleh (2014), Peachey *et al.* (2014), Yucel (2012), Yang (2011), Emery and Barker (2007).

The results of the analysis also contest the criticism of Yukl (1999) and Odumeru and Ifeanyi which states that leadership of this type is not entirely good. Proven in this study, the four dimensions have been implemented very well, especially, how leaders/managers assist employees in facing difficulties with problem solving and how managers build employee motivation through the implementation of the dimensions of inspirational motivation.

The influence of transformational leadership on organizational commitment of employees: The influence of transformational leadership on organizational commitment of employees is a significant positive that gives meaning that with the increasingly transformational leadership role that is felt it will increase employee commitment. The results are in line with the results of the study of Yang *et al.* (2011), Gumusglou (2013) and

Peachey *et al.* (2014). Emery and Barker (2007) found the importance of building effective transformational leadership. Another study was conducted by Jeanette (2015) who tested each of the transformational leadership dimensions with organizational commitment and consistently proved that those dimensions had a significant effect. Riaz *et al.* (2011) found a strong positive interaction between transformational leadership and work commitment, the results showed that managers must adopt transformational leadership styles in order to increase employee commitment to the firm.

The influence of transformational leadership on knowledge sharing: The transformational leadership felt by employees has a significant effect on the practice of sharing knowledge which means that with the increasing implementation of transformational dimensions of perceived leadership dimension it will increase knowledge sharing practice. This research is in line with Carmeli *et al.* (2011) who found that transformational leadership had a positive effect on knowledge sharing behavior. Huang *et al.* (2008) found that transformational leaders create a warm atmosphere that builds interaction between employees and trusts in sharing information and knowledge through peers interaction. Bradshaw *et al.* who found a positive relationship between transformational leadership and knowledge sharing through the SECI Model (Socialization, externalization, combination and internalisation).

The influence of transformational leadership on employee performance: The effect of transformational leadership on employee performance is positively significant. This indicates that the transformational leadership felt by employees has an effect on personal level performance which gives meaning that with the increasingly transformational leadership role that is perceived it will further improve employee performance. Studies conducted by Obeidat *et al.* (2015) found that transformational leadership had a significant effect on employee performance. These findings confirm previous studies conducted by Bass *et al.* (1990) who say that transformational leadership is a variable that can be used to predict employee performance.

The effect of job satisfaction on organizational commitment of employees: The effect of job satisfaction on organizational commitment of employees is positively significant. This indicates that job satisfaction perceived by employees has an effect on the commitment to the

organization which gives meaning that with the increasing of job satisfaction that will increase the employee commitment. The results of this study are supported by results from several researchers such as those conducted by Yang *et al.* (2011), Fu and Deshpande (2014) and Moneke and Umeh (2013) who found that job satisfaction had a significant effect on organizational commitment. Aydogyu and Asikgil found that job satisfaction had a positive effect on organizational commitment and Karim and Rehman (2012) found a high correlation between job satisfaction and organizational commitment through empowerment because employees felt more confident to show contribution to the organization.

The influence of job satisfaction on knowledge sharing employees: The result of the analysis shows that the influence of job satisfaction on the knowledge sharing of employees is positively insignificant which gives the meaning that the perceived job satisfaction has no significant effect to the practice of knowledge sharing of employees.

Another study that yielded identical findings was a study by Bektas *et al.* examining the relationship between job satisfaction and knowledge sharing among five-star hotel employees in Turkidimana employees have job satisfaction but not knowledge sharing practice due to lack of time to communicate with each other. In the perspective of social exchange theory (Blau, 1964) the relationship of satisfaction with knowledge sharing involves not only material but is a non-material exchange that usually occurs in a social relationship. Social exchange can take shape and dimension because it involves emotion but not out of the basic principle of exchange that is a rational choice. Employees who are satisfied with their work will do knowledge sharing through an exchange mechanism that involves rationality.

The influence of job satisfaction on employee performance: The effect of job satisfaction on employee performance is positively significant. This indicates that job satisfaction is perceived by employees have an effect on the performance of individual employees which gives meaning that with the increasing of job satisfaction which is felt, hence will increasingly improve employee performance. The results of this study are supported by empirical studies conducted by Funmilola *et al.* (2013) who said that the dimension of job satisfaction consisting of pay, supervision, promotion, work it self and work condition contribute positively and significantly to the performance of employees.

The influence of organizational commitment to knowledge sharing employees: The influence of organizational commitment of employees to knowledge sharing is positively insignificant. This indicates that organizational commitment perceived by employees has no effect on knowledge sharing practices. This happens because individuals with high organizational commitment tend to be more sensitive and cautious in sharing practices with colleagues because they are considered less important, employees will stay with the organization in the long run, realizing knowledge is valuable and thus employees will show reluctance to share knowledge with other colleagues, so that, employees maintain a competitive advantage while they are to remain in the organization.

The results of this study are supported by a study conducted by Pei-Lee and Hongyi who found that organizational organizational commitment has no significant effect on knowledge sharing. From the literature search it can be said that very few researchers have alluded to the negative potential of a high level of commitment (Meyer and Maltin, 2010) to individual behaviors within an organization because excessive (extreme) commitment to some things can sometimes lead to conflict. This means that on the one hand the employees are committed to their work but on the other hand are expected to share their knowledge to improve personal performance, peers or work groups.

The influence of organizational commitment on employee performance: The influence of organizational commitment of employees on employee performance is positively significant. This indicates that the organizational commitment perceived by employees has an effect on employee performance which gives meaning that with the increasing of the perceived commitment it will increasingly improve employee performance.

The results of this study are supported by research conducted by Ahmad *et al.* (2010), Awamleh and Al-Dmour (2004) says that committed employees tend to generate positive outcomes such as better performance, higher job satisfaction, improved corporate profits, lower turnover and small attendance rates. If this can be done then the company will benefit from increased employee loyalty and the ability to deal with the dynamics of a flexible organizational environment.

The influence of knowledge sharing on employee performance: The effect of knowledge sharing on employee performance is positively significant. This indicates that knowledge sharing performed by employees has an effect on employee performance which gives meaning that with the increasing of knowledge sharing practice will increase performance.

The results of this study confirm the results of a study conducted by Akram and Bokhari (2011) stating that employees in sharing knowledge with other employees started from the motivation and willingness to do so to improve performance, need to create a conducive environment, so that, employees have a sense of ownership and sense of responsibility towards personal performance and peer performance (Ozlen, 2015). Wang and Wang found that knowledge sharing has a positive direct relationship with employee performance, employee innovation improvements that have implications for improving organizational performance and there is a positive and significant relationship between knowledge sharing and employee performance (Obeidat *et al.*, 2015).

The role of job satisfaction mediates transformational leadership relationships and employee performance: The results of the analysis test prove that the strengthening of job satisfaction can be a mediator for transformational leadership constructs in order to improve employee performance through the role of mediation in part, so that, mediation effect is not the only strength that impact on performance. Based on the prediction result, the estimation on the interaction effect is 0.474 is positive but still smaller than the prediction result of direct transformational leadership relationship to job satisfaction of 0.844, this research can prove that transformational leadership strengthens job satisfaction as mediator for employee performance strengthening. This means that transformational leadership can choose two channels in strengthening employee performance because the mediation path is positive, so that, both paths through transformational leadership constructs have strategic value in order to strengthen employee performance.

The role of organizational commitment mediates transformational leadership relationships and employee performance: The results of the analysis test prove that the strengthening of organizational commitment can be a mediator for transformational leadership constructs in order to improve employee performance through mediation role in part, so that, mediation effect is not the only strength that impact on employee performance. Based on predictions, the estimation on the interaction effect is 0.459 is positive and greater than the prediction result of direct transformational leadership relationship toward organizational commitment of 0.382. This study can prove that transformational leadership strengthens the position of organizational commitment as a mediator for the strengthening of employee performance. That transformational leadership can choose two channels in strengthening employee performance because the path of

mediation is positive, so that, both paths through transformational leadership constructs have strategic value in order to strengthen employee performance.

CONCLUSION

This study offers a more comprehensive knowledge and conceptualization of a new research model, providing a clear and systematic understanding of the interrelationships of variables, the second is the elaboration of the knowledge sharing dimensions of Nonaka and Takeuchi (1995) and Lin (2007) research results. The results of the analysis suggest that the SECI concept model offered by Nonaka and Takeuchi (1995) does not explain comprehensively the dimensions of knowledge sharing variables as they focus on the internal context, so that, Lin (2007) findings with the concept of IOT Model more focused on the external context are able to cover such weaknesses and become a systematic and comprehensive concept.

This research provides an explanation and understanding that the SME sector is very potential to build the atmosphere and culture of knowledge sharing practices in a sustainable and able to appreciate the intellectual assets of the organization because SMEs have unique resources to win competitive competition as described by Barney in resource based view theory and has unique knowledge as described by Teece *et al.* (2001) in knowledge based view theory.

The role of managers is very important as a trigger in building job satisfaction and organizational commitment stimulates the sharing of knowledge in order to improve performance, carried out continuously and consistently, so that, the consequences are increased personal employee level performance, build a solid team performance, so that, later expected to improve organizational performance, sustainability and competitive advantages (Pugna and Boldeanu, 2014). In the individual level, employees clearly understand the knowledge sharing mechanisms of sharing willingness (intrinsic motivation), sharing ideas or ideas, absorbing knowledge that plays an important role in improving individual performance (Michailova and Minbaeva, 2012).

LIMITATIONS

As for the limitations of the research is that this study does not claim that the results of the research can be applied equally well on other subjects, so, the results can not be generalized. This research is a study of keprilakuan with span of one period of research, so that, in the future need to do research research which have the character of multi year (longitudinal study).

RECOMMENDATIONS

Further research is conducted on all sectors of SMEs, so that, the results and research findings will be generalized, using 360-degree appraisal method in assessing employee's performance, from personal appraisal, colleague/co-worker, subordinate and leader, so that, the result of assessment is protected from the effect of desirability effect, comparing the antecedents of knowledge sharing to the performance of employees in the context of SMEs and companies that have a high level of readiness to know the role of knowledge sharing in improving employee performance of both research subjects.

REFERENCES

- Abdullah, N.J.S., I.A. Ismail and K. Idrus, 2015. Organizational antecedent with job satisfaction, work performance as mediators and knowledge sharing practices among academician at Malaysia research universities. *Intl. J. Econ. Financial Issues*, 5: 57-62.
- Akram, F. and R. Bokhari, 2011. The role of knowledge sharing on individual performance considering the factor of motivation the conceptual framework. *Intl. J. Multi. Sci. Eng.*, 2: 44-48.
- Allen, J.N. and P.J. Meyer, 1997. *Psychology in Management*. McGraw-Hill Company, New York, USA.,.
- Awamleh, R. and H. Al-Dmour, 2004. The impact of transformational leadership on job satisfaction and self-perceived performance of banking employees: The case of Jordan. *Intl. Bus. Econ. Res. J.*, 3: 29-42.
- Bass, B.M., 1985. *Leadership and Performance beyond Expectations*. The Free Press, New York, ISBN-13: 978-0029018101, Pages: 256.
- Bass, B.M., B.J. Avolio and J. Pointon, 1990. The implications of transactional and transformational leadership for individual, team and organizational development. *Res. Org. Change Dev.*, 4: 231-272.
- Belias, D. and A. Koustelios, 2014. Transformational leadership and job satisfaction in the banking sector: A review. *Intl. Rev. Manage. Marketing*, 4: 187-200.
- Blau, P.M., 1964. *Exchange and Power in Social Life*. Wiley, New York, USA.
- Bradshaw, R., M. Chebbi and H. Oztel, 2015. Leadership and knowledge sharing. *Asian J. Bus. Res.*, 1178:1-20.
- Bushra, F., U. Ahmad and A. Naveed, 2011. Effect of transformational leadership on employees job satisfaction and organizational commitment in banking sector of Lahore (Pakistan). *Intl. J. Bus. Soc. Sci.*, 2: 216-267.

- Carmeli, A., L. Atwater and A. Levi, 2011. How leadership enhances employees' knowledge sharing: The intervening roles of relational and organizational identification. *J. Technol. Transfer*, 36: 257-274.
- Chin, W.W., 2010. How to Write Up and Report PLS Analyses. In: *Handbook of Partial Least Squares: Concepts, Methods and Application*, Vinzi, V.E., W.W. Chin, J. Henseler and H. Wang (Eds.). Springer, New York, USA., ISBN-13: 9783540328254, pp:655-690.
- Cohen, J., 1988. *Statistical Power Analysis for the Behavioral Sciences*. L. Erlbaum Associates, New Jersey, USA., Pages: 567.
- Daud, K.K., R. Holian and J. Zhang, 2014. Job satisfaction and organizational commitment in the public sector: A study of a closed government agency. *Intl. J. Innovation Manage. Technol.*, 362: 5-5.
- Demirel, Y. and K. Goc, 2013. The impact of organizational commitment on knowledge sharing. *Proceedings of the 1st Annual International Conference on Interdisciplinary AIIC*, April 24-26, 2013, AIIC Azores, Portugal, pp: 954-963.
- Emery, C.R. and K.J. Barker, 2007. The effect of transactional and transformational leadership styles on the organizational commitment and job satisfaction of customer contact personnel. *J. Organizational Culture Commun. Conflict*, 11: 77-90.
- Fernandes, C., and R. Awamleh, 2014. The impact of transformational and transactional leadership styles on employees satisfaction and performance: An empirical test in a multicultural environment. *Intl. Bus. Econ. Res. J.*, 3: 65-76.
- Fu, W. and S.P. Deshpande, 2014. The impact of caring climate, job satisfaction and organizational commitment on job performance of employees in a Chinas insurance company. *J. Bus. Ethics*, 124: 339-349.
- Funmilola, O.F., K.T. Sola and A.G. Olusola, 2013. Impact of job satisfaction dimensions on job performance in a small and medium enterprise in Ibadan, South Western, Nigeria. *Interdiscip. J. Contemp. Res. Bus.*, 4: 509-521.
- Geisser, S., 1971. The Inferential use of Predictive Distributions. In: *Foundations of Statistical Inference*, Godambe, V.P. and D.A. Sportt (Eds.). Holt McDougal, New York, USA., pp: 456-469.
- Ghozali, I. and H. Latan, 2015. [Partial Least Squares: Concepts, Techniques and Applications use the Smart PLS 3.0 Program for Empirical Research]. Publisher Badan Penerbit Universitas Diponegoro, Semarang, Indonesia, (In Indonesian).
- Gumusluoglu, L., Z. Karakitapoglu-Aygun and G. Hirst, 2013. Transformational leadership and R&D workers multiple commitments: Do justice and span of control matter?. *J. Bus. Res.*, 66: 2269-2278.
- Hair, J.F., W.C. Black, B.J. Babin and R.E. Anderson, 2010. *Multivariate Data Analysis*. 7th Edn., Prentice Hall, Upper Saddle River, New Jersey, ISBN-13: 9780138132637, Pages: 785.
- Han, S.H., G. Seo, S.W. Yoon and D.Y. Yoon, 2016. Transformational leadership and knowledge sharing: Mediating roles of employee's empowerment, commitment and citizenship behaviors. *J. Workplace Learn.*, 28: 130-149.
- Hooff, V.D.B. and D.V.L.F. Weenen, 2004. Committed to share: Commitment and CMC use as antecedents of knowledge sharing. *Knowledge Process Manage.*, 11: 13-24.
- Horvat, J., K. Sharma and S. Bobek, 2015. Knowledge sharing and performance appraisal of employees: A pilot case study. *Rev. Integr. Bus. Econ. Res.*, 4: 62-73.
- Huang, Q., R.M. Davison, H. Liu and J. Gu, 2008. The impact of leadership style on Knowledge-sharing intentions in China. *J. Global Inf. Manage.*, 16: 67-91.
- Jeanette, P.A., 2015. 201 Leadership and organizational commitment in non profit long term care organizations: The direct care worker perspective. *Creighton J. Interdiscip. Leadersh.*, 1: 68-85.
- Karim, F. and O. Rehman, 2012. Impact of job satisfaction, perceived organizational justice and employee empowerment on organizational commitment in semi-government organizations of Pakistan. *J. Bus. Stud. Q.*, 3: 92-104.
- Katic, A., I. Cosic, G. Andelic and S. Raletic, 2012. Review of competitiveness indices that use knowledge as a criterion. *Acta Polytech. Hungarica*, 9: 25-45.
- Kordy, E.M., 2013. Transformational leadership and organizational culture as predictors of employees attitudinal outcomes. *Bus. Manage. Dyn.*, 3: 15-26.
- Liang, T.L., L.C. Chan, C.W. Lin and Y.L. Huang, 2011. Relationship between leadership behaviors and task performance: The mediation role of job satisfaction and the moderation role of social distance. *Afr. J. Bus. Manage.*, 5: 5920-5928.
- Lin, H.F., 2007. Knowledge sharing and firm innovation capability: An empirical study. *Int. J. Manpower*, 28: 315-332.
- Locke, E., 1976. The Nature and Causes of Job Satisfaction. In: *Handbook of Industrial and Organizational Psychology*, Durnette, M. (Ed.). Rand McNally, Skokie, Illinois, USA., pp: 1297-1349.

- Long, C.S., W.M.M. Yusof, T.O. Kowang and L.H. Heng, 2014. The impact of transformational leadership style on job satisfaction. *World Appl. Sci. J.*, 29: 117-124.
- Luthans, F., 2011. *Organizational Behaviour: An Evidence-Based Approach*. McGraw-Hill, New York, USA., ISBN:9780071289399, Pages: 574.
- MacKenzie, S.B., P.M. Podsakoff and N.P. Podsakoff, 2011. Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. *MIS Quarterly*, 35: 293-334.
- Malik, M.E., S. Nawab, B. Naeem and R.Q. Danish, 2010. Job satisfaction and organizational commitment of university teachers in public sector of Pakistan. *Int. J. Bus. Manage.*, 5: 17-26.
- Masa'deh, R.E., B.Y. Obeidat and A. Tarhini, 2016. A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance and firm performance: A structural equation modelling approach. *J. Manage. Dev.*, 35: 681-705.
- Menguc, B., S. Auh and L. Ozanne, 2010. The interactive effect of internal and external factors on a proactive environmental strategy and its influence on a firm's performance. *J. Bus. Ethics*, 94: 279-298.
- Meyer, J.P. and E.R. Maltin, 2010. Employee commitment and Well-being: A critical review, theoretical framework and research agenda. *J. Vocational Behav.*, 77: 323-337.
- Michailova, S. and D.B. Minbaeva, 2012. Organizational values and knowledge sharing in multinational corporations: The Danisco case. *Intl. Bus. Rev.*, 21: 59-70.
- Moneke, N.I. and O.J. Umeh, 2013. How organizational commitment of critical care nurses influence their overall job satisfaction. *J. Nurs. Educ. Pract.*, 4: 148-161.
- Neubert, M.J. and K. Halbesleben, 2015. Called to commitment: An examination of relationships between spiritual calling, job satisfaction and organizational commitment. *J. Bus. Ethics*, 132: 859-872.
- Nonaka, I. and H. Takeuchi, 1995. *Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, Oxford.
- Obeidat, B.Y., D.S. Zyod and A.A.H. Gharaibeh, 2015. The associations among transformational leadership, transactional leadership, knowledge sharing, job performance and firm performance: A theoretical model. *J. Soc. Sci.*, 4: 848-866.
- Ozlen, M.K., 2015. Knowledge sharing behaviour of Bosnian enterprises. *Accounting Manage. Inf. Syst.*, 14: 575-590.
- Peachey, W.J., J.L. Burton and E.J. Wells, 2014. Examining the influence of transformational leadership, organizational commitment, job embeddedness and job search behaviors on turnover intentions in intercollegiate athletics. *Leadersh. Organ. Dev. J.*, 35: 740-755.
- Penrose, E., 1959. *The Theory of the Growth of the Firm*. 3rd Edn., Oxford University Press Inc, New York, USA.,.
- Pugna, I.B. and D.M. Boldeanu, 2014. Factors affecting establishment of an institutional knowledge management Culture-a study of organizational vision. *Accounting Manage. Inf. Syst.*, 13: 559-583.
- Qureshi, J.A., K. Hayat, M. Ali and N. Sarwat, 2011. Impact of job satisfaction and organizational commitment on employee performance, evidence from Pakistan. *Interdiscip. J. Contemp. Res. Bus.*, 3: 642-657.
- Rauch, A., M. Frese and A. Utsch, 2005. Effects of human capital and long-term human resources development and utilization on employment growth of small-scale businesses: A causal analysis. *Entrepreneurship Theory Pract.*, 29: 681-698.
- Riaz, T., M.U. Akram and H. Ijaz, 2011. Impact of transformational leadership style on affective employees commitment: An empirical study of banking sector in Islamabad (Pakistan). *J. Commerce*, 3: 43-51.
- Shurbagi, A.M.A., 2014. The relationship between transformational leadership style job satisfaction and the effect of organizational commitment. *Intl. Bus. Res.*, 7: 126-128.
- Singleton, R. and B. Straits, 2010. *Approach to Social Research*. 5th Edn., Oxford University Press, Oxford, UK., ISBN:9780195372984, Pages: 654.
- Stone, M., 1974. Cross-validatory choice and assessment of statistical predictions. *J. R. Stat. Soc.*, 36: 111-147.
- Suliman, A. and A.A. Al-Hosani, 2014. Job satisfaction and knowledge sharing: The case of the UAE. *Issues Bus. Manage. Econ.*, 2: 24-33.
- Teece, D.J., G. Pisano and A. Shuen, 1997. Dynamic capabilities and strategic management. *Strategic Manage. J.*, 18: 509-533.
- Waheed, H., T.M. Qureshi, M.A. Khan and S.T. Hijazi, 2013. Mediating role of knowledge sharing: Organizational performance for competitive advantage and innovation. *Afr. J. Bus. Manage.*, 7: 536-547.

- Wang, S. and R.A. Noe, 2010. Knowledge sharing: A review and directions for future research. *Hum. Resour. Manage. Rev.*, 20: 115-131.
- Yang, F.H., M. Wu, C.C. Chang and Y. Chien, 2011. Elucidating the relationships among transformational leadership, job satisfaction, commitment foci and commitment bases in the public sector. *Public Personnel Manage.*, 40: 265-265.
- Yeh, H. and D. Hong, 2012. The mediating effect of organizational commitment on leadership type and job performance. *J. Hum. Resour. Adult Learn.*, 8: 50-59.
- Yiing, H.L. and B.A.K. Zaman, 2009. The moderating effects of organizational culture on the relationships between leadership behaviour and organizational commitment and between organizational commitment and job satisfaction and performance. *Leadersh. Organiz. Dev. J.*, 30: 53-86.
- Yucel, I., 2012. Examining the relationships among job satisfaction, organizational commitment and turnover intention: An empirical study. *Intl. J. Bus. Manage.*, 7: 44-57.
- Yukl, G., 1999. An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *Leadership Q.*, 10: 285-305.