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THE RELATIONSHIP BETWEEN INDIVIDUAL COMPETENCIES AND CREATIVITY OF CADET WITH KNOWLEDGE SHARING: A CASE STUDY AT THE INDONESIAN PILOT ACADEMY

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ABSTRACT

Purpose: This study aims to analyze the effect of knowledge sharing on competency development, knowledge sharing on individual creativity, and competency development on individual creativity for cadets.

Theoretical framework: Knowledge sharing is a culture of social interaction that involves knowledge, experience and skills between members in an organization. Competency is a factor in achieving an organizational goal so that individual performance can increase. For Creativity can be assumed as human power or ability to create something and then become the final result of a person's thinking.

Design/methodology/approach: This type of research is explanatory research conducted with the quantitative approach with 50 respondents from cadets at Politeknik Penerbangan Surabaya. The data analysis technique is used structural equation modeling (SEM) analysis with partial least square (PLS) tools.

Findings: This results are knowledge sharing has positive effect on the Competency Development, knowledge sharing has positive effect on Individual Creativity, and competency development has positive effect on Individual Creativity for cadets.

Research, Practical & Social implications: This research contributes to the application of teacher performance in learning class to improve competency development on individual creativity so that learning is more effective.

Originality/value: The results obtained in this study are innovative and relevant for lecture, in the context of knowledge sharing, competency development, and individual creativity for cadets.

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A RELAÇÃO ENTRE AS COMPETÊNCIAS INDIVIDUAIS E A CRIATIVIDADE DOS CADETES COM O COMPARTILHAMENTO DE CONHECIMENTO: UM ESTUDO DE CASO NA ACADEMIA DE PILOTOS DA INDONÉSIA

RESUMO

Objetivo: Este estudo tem como objetivo analisar o efeito do compartilhamento de conhecimento no desenvolvimento de competências, do compartilhamento de conhecimento na criatividade individual e do desenvolvimento de competências na criatividade individual dos cadetes.

Estrutura teórica: O compartilhamento de conhecimento é uma cultura de interação social que envolve conhecimento, experiência e habilidades entre os membros de uma organização. A competência é um fator para

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atingir uma meta organizacional, de modo que o desempenho individual possa aumentar. A criatividade pode ser considerada como o poder ou a capacidade humana de criar algo e se tornar o resultado final do pensamento de uma pessoa.
Projeto/metodologia/abordagem: Esse tipo de pesquisa é uma pesquisa explicativa conduzida com abordagem quantitativa com 50 respondentes de cadetes da Politeknik Penerbangan Surabaya. A técnica de análise de dados utilizada é a análise de modelagem de equações estruturais (SEM) com ferramentas de mínimos quadrados parciais (PLS).
Conclusões: Os resultados indicam que o compartilhamento de conhecimento tem efeito positivo sobre o desenvolvimento de competências, o compartilhamento de conhecimento tem efeito positivo sobre a criatividade individual e o desenvolvimento de competências tem efeito positivo sobre a criatividade individual dos cadetes.
Implicações sociais, práticas e de pesquisa: Esta pesquisa contribui para a aplicação do desempenho do professor na aula de aprendizagem para melhorar o desenvolvimento da competência na criatividade individual, de modo que a aprendizagem seja mais eficaz.
Originalidade/valor: Os resultados obtidos neste estudo são inovadores e relevantes para as aulas, no contexto do compartilhamento de conhecimento, desenvolvimento de competências e criatividade individual dos cadetes.

Palavras-chave: Compartilhamento de Conhecimento, Desenvolvimento de Competências, Criatividade Individual, Gerenciamento.

LA RELACIÓN ENTRE LAS COMPETENCIAS INDIVIDUALES Y LA CREATIVIDAD DE LOS CADETES CON EL INTERCAMBIO DE CONOCIMIENTOS: UN ESTUDIO DE CASO EN LA ACADEMIA DE PILOTOS DE INDONESIA

RESUMEN
Objetivo: Este estudio pretende examinar el efecto del intercambio de conocimientos en el desarrollo de competencias, del intercambio de conocimientos en la creatividad individual y del desarrollo de competencias en la creatividad individual de los cadetes.
Marco teórico: El intercambio de conocimientos es una cultura de interacción social que implica conocimientos, experiencia y competencias entre los miembros de una organización. La competencia es un factor que permite alcanzar un objetivo organizativo para que aumente el rendimiento individual. La creatividad puede considerarse como el poder o la capacidad humana de crear algo y convertirse en el resultado final del pensamiento de una persona.
Diseño/metodología/enfoque: Este tipo de investigación es una investigación explicativa realizada con un enfoque cuantitativo con 50 encuestados de cadetes de Politeknik Penerbangan Surabaya. La técnica de análisis de datos utilizada es el análisis de modelos de ecuaciones estructurales (SEM) con herramientas de mínimos cuadrados parciales (PLS).
Conclusiones: Los resultados indican que el intercambio de conocimientos tiene un efecto positivo en el desarrollo de habilidades, el intercambio de conocimientos tiene un efecto positivo en la creatividad individual y el desarrollo de habilidades tiene un efecto positivo en la creatividad individual de los cadetes.
Implicaciones sociales, prácticas y de investigación: Esta investigación contribuye a la aplicación de la actuación docente en el aula de aprendizaje para mejorar el desarrollo de competencias en creatividad individual, de modo que el aprendizaje sea más eficaz.
Originalidad/valor: Los resultados obtenidos en este estudio son innovadores y relevantes para el aula en el contexto del intercambio de conocimientos, el desarrollo de competencias y la creatividad individual de los cadetes.

Palabras clave: Intercambio de Conocimientos, Desarrollo de Competencias, Creatividad Individual, Gestión.

INTRODUCTION

Education is one way to improve the quality of human resources, especially in Indonesia (Harmoko, 2021). This method can increase intelligence in the life of a nation. Therefore, education and life are very important things for a nation. Therefore, education and life are very important things for a nation. The basis and purpose of education in a nation varies depending

on the generation in that nation. Of course, the basis and objectives are adjusted to the ideas, desires, and needs (Ahmadi & Uhbiyati, 2001).

Effective educational implementation is demanded to be able to improve knowledges of students (Dunlosky et al, 2013). In improving knowledges, it needs supporting knowledge sharing from the known to the unkown. Lee (2018) told that knowledge sharing is important facilitator from creative ideas, and the main factor for facilitating creativity and organizational innovation. Furthermore, knowledge sharing can also stimulate individual creativity (Chen et al, 2010), because knowledge sharing can help collaborations in some organization, and can also improve domain knowledges (Amin et al, 2011). All of these can be explained by the facts that knowledge resources are the most important factors for facilitating individual creativity.

Knowledge sharing like organizational member participation in exchanging precious knowledges, skills, and experiences with other organizational members (Darmasetiawan et al, 2013). Sharing knowledge happens if someone wants to share and get knowledges from other people, so resulting competency (Naim & Lenka, 2017). This case is supported by Naim and Lenka (2017) who stated that knowlwdge sharing purpoes to facilitate new knowledges among organizational members. Naim and Lenka (2017) also expressed that several researches have shown positive relations of knowledge sharing toward individual competency improvement.

Based on this problem, the purposes of this study mainly for analyzing the influences of: (1) knowledge sharing toward competency development; (2) knowledge sharing toward individual creativity; (3) competency development toward individual creativity in Politeknik Penerbangan Surabaya.

LITERATURE REVIEWS

Knowledge Sharing

Knowledge sharing can be defined as the behavior of a person voluntarily giving access to other people about their knowledge and experiences (Hansen & Avital, 2005). According to Lin (2007), knowledge sharing is a culture of social interaction that involves knowledge, experience and skills between members in an organization. Some of the information provided in this session is knowledge through discussions, insights during presentations, the latest online trends during this pandemic, and some self-development tips.

According to Lumantobing (2011) knowledge sharing is divided into two types, they are tacit knowledge and explicit knowledge. According to Lumantobing (2011) tacit knowledge is knowledge in human minds in the forms of intuitions, skills, values and beliefs very difficult

to formalize and share to other people. Whereas explicit knowledge is knowledge that can or has been codified in document forms or other forms so it can be transferred and distributed easily by using various medias. Then, knowledge can be said to be explicit, for example procedures or documents or explicit, for example, intuitive or experience-based.

Competency Development

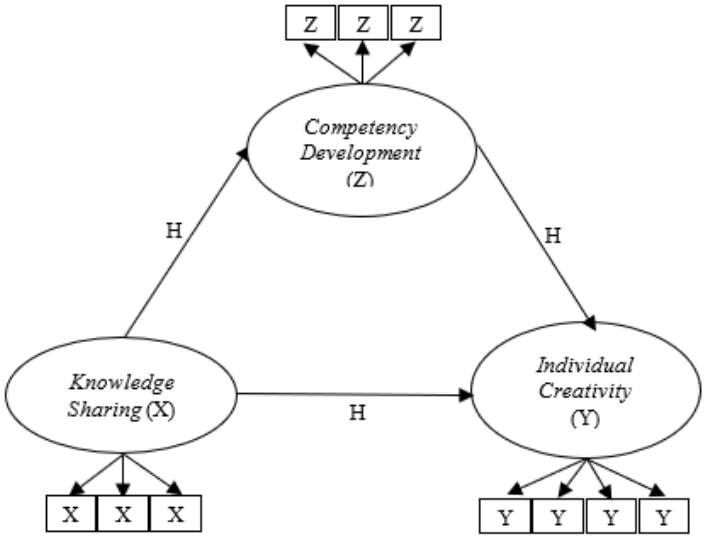
Competency as basic characteristic from one individual related causally to effective reference-criteria or very high performance in a job (Spencer & Spencer, 2008). Chouhan & Sivastava (2014) saw competency as attribute that differentiates superior players from normal players. According to Naim and Lenka (2017), competency is a factor in achieving an organizational goal so that individual performance can increase. Gordon (1988) explains several dimensions contained in the concept of competency as follows:

1. Understanding, namely the cognitive depth that is owned by someone;
2. Skills or abilities, namely skills or talents possessed by individuals to do the work assigned to them;
3. Knowledge, namely awareness in the cognitive field, which means knowing what to do;
4. Interest, namely a person's high tendency towards something or to do what must be done;
5. Attitude, namely a person's reaction to stimuli that come from outside.

Individual Creativity

Creativity basically describes idea development about practices, procedures, products, and/or new services and have potencies to be useful for organization (Cekmecelioglu & Gunsel, 2013; Alzghoul et al, 2023; Dewi & Ginting, 2022). Creativity can be assumed as human power or ability to create something and then become the final result of a person's thinking (Bagheri et al, 2013). Dewett (2004) believed that with creativity is able to create an efficient new ideas in the organization. Besides that, in managerial program adjustability really needs new ideas (Rezaeiyan, 2006). This is because this ability is considered to be able to find solutions that may arise. If someone can maximize decision-taking results, he/she will be called as rational person (Robbins et al, 2001).

Figure 1. Conceptual Framework



Source: Prepared by Prasetyo et al (2023)

Hypothesis

- H1: Knowledge Sharing influences significantly and positively toward Competency Development in Politeknik Penerbangan Surabaya
- H2: Knowledge Sharing influences significantly and positively toward Individual Creativity in Politeknik Penerbangan Surabaya
- H3: Competency Development influences significantly and positively toward Individual Creativity in Politeknik Penerbangan Surabaya

METHODOLOGY

Causal research is the method used in this study. This study relates a causal relationship, where the independent variable is a variable that influences and the dependent variable is the one that is influenced. There are 50 cadet respondents at the Aviation Polytechnic of Surabaya, Indonesia.

For variable operational of definitions in this study consist knowledge sharing (X), Competency Development (Z), and Individual Creativity (Y). The variable indicators of knowledge sharing refer to Naim and Lenka (2017), they are knowledge sharing behavior, knowledge donating, and knowledge collecting. Furthermore, for competency development is positive change or expansion in individual competency level.

The variable indicators of competency development refers to Naim and Lenka (2017), they are professional competency development, personal competency development and social competency development. The last, individual creativity is idea development about practices,

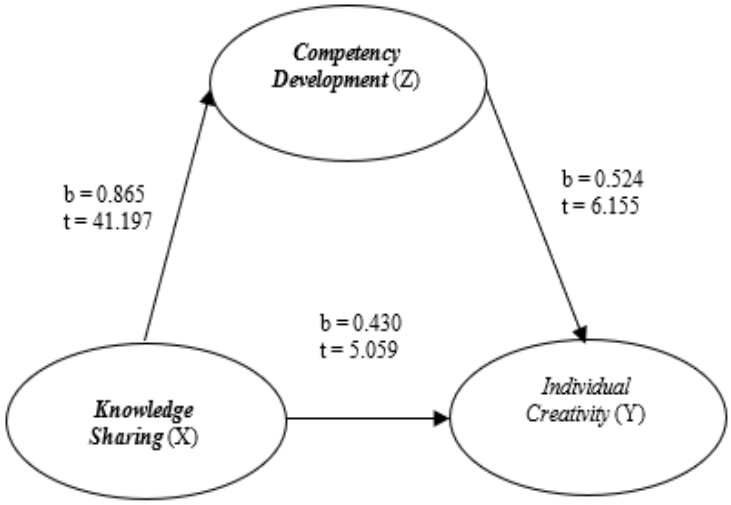
procedures, products and new services and have potencies for becoming useful for organization. The variable indicators of individual creativity refer to Lee (2018), they are good creative idea sources, coming with new and practical ideas for improving performances, fearless to take risks and promoting and fighting ideas to other people.

With a survey through a questionnaire is the method used by the researcher. In addition, the Likert scale is also used in the calculation of the scale. The Structural Equation Model (SEM) is a data analysis technique used in this study to analyze data and test hypotheses (Ghozali, 2012). Then proceed with Partial Least Square (PLS) to answer the research hypothesis. Calculations are assisted by using Smart of PLS, because there are multi-lane relationships and formative and reflective forms (Ghozali & Latan, 2015).

RESULTS AND DISCUSSION

The initial step taken by researchers in evaluating the model with PLS is the R-square on each dependent latent variable. The initial step taken by researchers in evaluating the model with PLS is the R-square on each dependent latent variable. The results of endogenous latent variables in this study were weak (0.19), moderate (0.33) and good (0.67). Then, 0.749 (good) is a Knowledge Sharing variable that affects the Competency Development variable while 0.849 (good) is a Knowledge Sharing and Competency Development variable that affects the Individual Creativity variable. Based on structural model compatibility mainly all models are relevant. This can be seen from the value of Q2 = 0.962 >0.5. Therefore, the structural model is fit and proper.

Figure 2. PLS Inner Model



Source: Prepared by Prasetyo et al (2023)

In this study, Knowledge Sharing is an exogenous variable, competence development is an intervening variable, and individual creativity is an endogenous variable. Thus, Figure 2 shows that the Competency Development variable is influenced by the Knowledge Sharing variable while the Individual Creativity variable is influenced by the Knowledge Sharing and Competency Development variable showing the following equation:

$Z = 0.865\ X$

$Y = 0.430\ X + 0.524\ Z$

Hypothesis Examination Results

Hypothesis Test 1 (H1)

H1 is proven with the value t = 41.197 (t >1.96), so give effect the knowledge sharing has significant influences toward Competency Development. The relational directions of both variables are positive that means the Knowledge Sharing increases so it will be able to improve and improve Competency Development by having the influence amounts as 0.865.

Hypothesis 2 (H2)

H2 is proven with the value t = 5.059 (t>1.96), so it made the Knowledge Sharing has significant influences toward Individual Creativity. The second relational directions between variables of Knowledge Sharing and Individual Creativity have positive relational directions, it means that the Knowledge Sharing is better, so it will be able to improve and improve Individual Creativity by having the influence amounts as 0.430.

Hypothesis 3 (H3)

H3 is proven with the value t = 6.155 (t>1.96), then Competency Development has significant influences toward Individual Creativity. The relational directions of both variables are positive, it means that the better the Competency Development, so it will be able to improve and improve Individual Creativity by having the influence amounts as 0.524.

Knowledge Sharing Influences Toward Competency Development

From the data analysis show that 41,197 is the value t from knowledge sharing has significant influences toward Competency Development that means bigger than 1.96. From here, we can conclude that improvement of Competency Development in Politeknik Penerbangan Surabaya can be formed through high adoption of Knowledge Sharing. Influences

of Knowledge Sharing toward Competency Development are positive that show that the higher the intensities of knowledge sharing conducted by the cadets, so it can be able to improve competency development of each cadet in Politeknik Penerbangan Surabaya. Therefore, the first hypothesis that sounds knowledges sharing influences significantly and positively toward competency development in Politeknik Penerbangan Surabaya is acceptable.

Knowledge sharing has important roles in improvement of Competency Development in Politeknik Penerbangan Surabaya. This case is the same as the opinion of King in Naim and Lenka (2017) who stated that sharing knowledge purposes to facilitate new knowledge development among organizational members. Beside, it also a process of resulting social interaction between organizational members and units. This case is seen as distributing individual knowledges in some organization that involves social interactions, informational exchanges and creating knowledges. Therefore, it can be meant if Politeknik Penerbangan Surabaya wants to improve competence development owned by the cadets, so it is very important for the parties of Academy for caring to what extent intensities of knowledge sharing such as informational exchanges, creating knowledges, and also social interactions among fellow cadets and between the tutors and the cadets. The research results agree with Naim and Lenka (2017) who found that knowledge sharing has positive influences toward competency development.

Knowledge Sharing Influences Toward Individual Creativity

Because t = 5.059 and t > 1.96, so the knowledge sharing has significant influences toward Individual Creativity (proven) This case shows that creativity development of one cadet in Politeknik Penerbangan Surabaya can be formed through high knowledge sharing. The influences happen between variables of knowledge sharing and individual creativity are positive that can be meant that the higher the intensities of knowledge sharing conducted by the cadets, so it will improve and improve cadet creativities in Politeknik Penerbangan Surabaya. Therefore, the second hypothesis that sounds “Knowledge sharing influences significantly and positively toward individual creativity in Politeknik Penerbangan Surabaya is acceptable.

The findings in this research can be meant that knowledge sharing has important roles in improving individual creativity in Politeknik Penerbangan Surabaya. The important roles can be meant if Politeknik Penerbangan Surabaya wants to improve individual creativity of the cadets in Politeknik Penerbangan Surabaya, so it is very important for Academy for caring intensity level of knowledge sharing that is process for sending, distributing, and disseminating

knowledges intercadets or towards cadet tutors. This case is the same as the opinion of Tobing [6] who meant that knowledge sharing is some systematical process in sending, distributing, and disseminating multidimensional knowledges and contexts interindividuals or interorganizations through various methods or Medias. The finding results of Lee [2] are proved that there are positive relations between knowledge sharing and individual creativity.

Competency Development Influences Toward Individual Creativity

The result of this study show because t= 6.155 and t >1.96, this case shows that improvement of individual creativity in the cadets of Politeknik Penerbangan Surabaya can be formed through good competency development by each individual. Competency development influences toward individual creativity are positive that shows that the more the competency development that gives to each cadet, so it can be able to improve and improve individual creativity of the cadets in Politeknik Penerbangan Surabaya. Therefore, the third hypothesis that sounds "Competency development influences significantly and positively toward individual creativity in Politeknik Penerbangan Surabaya" is acceptable.

The last finding, competency development has important roles in improvement of individual creativity of the cadets in Politeknik Penerbangan Surabaya. The findings about the important roles of competency development in improving individual creativity can be meant that if Politeknik Penerbangan Surabaya wants to improve individual creativity owned by the cadets in Politeknik Penerbangan Surabaya, so it is very important for the parties of Academy for caring the competency development level given by Academy and the cadet tutors in Politeknik Penerbangan Surabaya.

CONCLUSION

In conclusion, there is a positive influence between knowledge sharing on competency development at Politeknik Penerbangan Surabaya, which is 41,197. Furthermore, there is also a positive effect of knowledge sharing on Individual Creativity, which is equal to 5.059. Finally, there is a t-value of 6.155 which states that there is a positive influence on competency development on individual creativity at Politeknik Penerbangan Surabaya, Indonesia. For future researchers, it is hoped that they can look for factors that influence student knowledge sharing through social media and individual creativity in the current digital era, so that it can be carried out properly and more effectively in future polytechnics.

REFERENCES

Ahmadi and Uhbiyati. (2001). *Ilmu Pendidikan*. Jakarta: Rineka Cipta.

Alzghoul, A., Algraibeh, K. M., Khawaldeh, K., Khaddam, A. A., & Al-Kasasbeh, O. (2023). Nexus of Strategic Thinking, Knowledge-Oriented Leadership, and Employee Creativity in Higher Education Institutes. *International Journal of Professional Business Review*, 8(4), e01107-e01107.

Amin, H., Rahman, A. R. A., Sondoh, S. L., & Hwa, A. M. C. (2011). Determinants of customers' intention to use Islamic personal financing: The case of Malaysian Islamic banks. *Journal of Islamic Accounting and Business Research*, *2*(1), 22-42.

Bagheri, G., Esmaili, M., Ahmad, A., and R. Seraji. (2013). Analysis The Effect Of Individual Creativity On The Employees Engagement At Work (Case Study: Agriculture Organization Of Qom). *International Journal of Accounting Research* Vol. 1, No.2

Cardy, R.L. and Selvarajan, T.T. (2006). Competencies Alternative Frameworks for Competitive Advantage. *Business Horizons*, 49, 235-245.

Cekmecelioglu, H.G.& Gunsel, A. (2013). The effects of individual creativity and organizational climate on firm innovativeness. *Procedia-Social and Behavioral Sciences*, 99 (6), 257-264.

Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms?. *Journal of financial economics*, *95*(1), 41-61.

Chouhan, V. S., & Srivastava, S. (2014). Understanding competencies and competency modeling—A literature survey. *IOSR Journal of Business and Management*, 16(1), 14-22.

Darmasetiawan, N. K., Idrus, M. S., Troena, E. A., & Salim, U. (2013). Application Concept of Social Capital Theory and Social Exchange Theory on Organizational Trust, Willingness To Share, Membership Involvement, and Knowledge Obtaining Dimensions in Industry Cluster. *International journal of business and behavioral sciences*, 3(2), 15-33.

Dewett, T. (2004), Employee creativity and the role of risk. *European Journal of Innovation Management*, Vol. 7 No. 4, pp. 257-266.

Dewi, I. J., & Ginting, G. (2022). Leadership and Entrepreneurship for Creativity and Survival of Tourism Villages in the Covid-19 Times: the Moderating Role of External Support. *International Journal of Professional Business Review*, 7(5), e0940-e0940.

Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public interest*, 14(1), 4-58.

Ghozali, I. (2012). *Aplikasi Analisis Multivariate dengan Program IBM SPSS*. Yogyakarta: Universitas Diponegoro.

Ghozali, I., & Latan, H. (2015). Partial least squares konsep, teknik dan aplikasi menggunakan program smartpls 3.0 untuk penelitian empiris. *Semarang: Badan Penerbit UNDIP*.

Gordon, P. (1988). Count/mass category acquisition: Distributional distinctions in children's speech. Journal of Child Language, 15(1), 109-128.

Hansen, S., & Avital, M. (2005). Share and share alike: The social and technological influences on knowledge sharing behavior. *Sprouts: Working Papers on Information Environments, Systems and Organizations*, 5, 1-19.

Harmoko, D. D. (2021). Digital Literacy As A Solution To Improve The Quality Of Indonesia's Human Resources. *Research and Development Journal of Education*, 7(2), 413-423.

Lee, J. (2018). The effects of knowledge sharing on individual creativity in higher edication institutions: Socio-technicaal view. *Administrative Sciences*, 8(12), 21

Lin, H. F. (2007). Knowledge sharing and firm innovation capability: an empirical study. International Journal of manpower, 28(3/4), 315-332.

Lumbantobing, P. (2011). *Manajemen Knowledge Sharing Berbasis Komunitas*. Bandung: Knowledge Management Society.

Naim, M. F., & Lenka. (2017). Linking knowledge sharing, competency development, and affective commitment: evidence from Indian Gen Y employees. *Journal of Knowledge Management*, Vol. 21 No. 4, 2017.

Rezaeiyan, A. (2006). *Organization and management fundamentals (Aliasghar Pourezzat, editor*). Tehran: SAMT publication, 8th ed

Robbins, S. P., DeCenzo, D. A., & Coulter, M. (2001). Fundamentals of management. *Upper Sandle River, New Jersey: USA*.

Spencer and Spencer. (2008). *Competence At Work*. Canada: John Wiley & Son.