

Human resource management practices associated with knowledge sharing at the higher education institutions.

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Abstract. The present study is design to determine whether the human resource management (HRM) practices have an association or relationship with knowledge sharing (KS) among academics at the higher education institutions. For the purpose of this study, the HRM practices included are training, compensation, and staffing. Statistical Package for the Social Sciences (SPSS) was applied to examine the data collected from 69 academics at the College of Business in University of Jeddah via questionnaire. The results indicated that training, compensation, and staffing showed an association with knowledge sharing among academics and all three practices significantly associated with knowledge sharing. This study provides two contributions. First, it reveals that the selected HRM practices impact knowledge sharing among academics at the College of Business. Second, since there is not abundant research about the HRM practices and knowledge sharing at universities, this research enriches the literature of HRM practices and knowledge sharing at the higher education institutions. Future research can examine the relationship between HRM practices such as human resource planning, performance evaluation, teamwork, and knowledge sharing. In addition, a future study may investigate the level of sharing knowledge between male and female at the higher education institutions.

Keywords: knowledge sharing, training, staffing, compensation, SPSS, human resources management, universities.

1. INTRODUCTION

Knowledge is believed to be the most critical component for organizations and institutions. Knowledge in universities is very rigorous, and sharing knowledge among faculty members, students, and society is essential. Institutions are moving from being knowledge initiators to stressing on the treatment of knowledge; they are required to be able to generate and allocate knowledge (Adhikari, 2010). Furthermore, universities are concentrating on research and development, knowledge, and practical applications exchange for business. In addition, they prepare learning opportunities through training programs and seminars. Universities utilize a well-design knowledge management system to store, maintain, transfer, and retrieve their knowledge because of the massive amount of knowledge that universities have. Drucker (1999) highlighted the significance of knowledge as corporation's reserves are shifting from human resources, assets, and the labor force to the capability to obtain, store, and transfer knowledge. Moreover, Davenport and Prusak (1998) described knowledge as a combination of morals, experiences, and related information that delivers a structure for assessing and interpreting new incidents/experiences. There are two types of knowledge: tacit knowledge and explicit knowledge. Tacit knowledge contains of a person's knowledge, experiences, skills, and competencies in a particular discipline; tacit knowledge implies an individual's intellect and intangible resources (Nonaka, 1995). Tacit knowledge can be hard to exchange between individuals in an organization because of the perception that knowledge is the assets of a person. On the other hand, Hislop (2005) defined explicit knowledge as definite knowledge that can be given by statements or figures and is separated from society's standards and entities. The key different between the two types of knowledge is that explicit knowledge can be stored, categorized, and relocated while tacit knowledge can be hard to acquire and transfer, thus enhancing the importance of this type of knowledge and the individual who has it. Knowledge in an organization can be managed or shared. Knowledge Management (KM) deal with developing and categorizing information to confirm the accomplishment of a company's objectives (Adhikari,

2010). Hatch & Dyer (2004) explained knowledge management (KM) as the process of producing, arranging, and communicating knowledge. Accordingly, colleges operate KM in four functions that are administration, public service, alumni service, and curriculum improvement (Prabowo, 2010). Although there has been an abundant study about knowledge sharing and knowledge management in commercial and educational environments (Fullwood, Rowley, & Delbridge, 2013; Anwar & Prasad, 2011; Wei Chong, Yen Yuen, Chew Gan; 2014), studies that investigate the link between HRM practices and knowledge sharing in higher education institutions still insufficient. Knowledge sharing (KS) describes a person's attention and preference to share knowledge with employees or staff in a corporation. Yang (2004) defined KS as the sharing of knowledge among an employee's department or corporation. Nevertheless, the procedures of sharing knowledge should be intentional, and the universities should emphasize on how to boost and inspire individuals to willingly share the knowledge (Bock, Zmud, Kim, & Lee, 2005). Moreover, the objective of sharing knowledge is to motivate employees in the organization to produce ideas and assist the corporation to maintain competitive advantages (Lin, 2007). Dessler (2011) explained HRM as a combination of functions such as training, performance appraisal, staffing, evaluation, and compensation. Equally important, Armstrong (2000) described HRM as the administration of an employee's performance, accomplishment, and motivation. Randhawa (2007) asserted that HRM includes practices such as organizing, planning, employee placement, controlling, and preservation to accomplish the employees' and corporations' objectives. It has been noted that research on KM and KS mainly focused on commercial industry and not toward higher education institutions. Moreover, research about KS dedicated on the behavior of an individual involving sharing knowledge. In this respect, the aim of the current article is to investigate whether the HRM practices could influence or has an association with knowledge sharing among academics at the College of Business. Training, compensation, and staffing are the three practices of HRM that the present study concentrates on to determine the association of sharing knowledge in higher education institution among academics.

This study includes a literature review explaining HRM practices (training, compensation, and staffing) and KS. The third section of this manuscript introduces the methodology, and the fourth section addresses the results. The fifth section presents the discussion of the study, and the sixth section highlights limitations and future study. This paper is finalized with conclusion and some recommendations.

2. LITERATURE REVIEW

The review of the literature illustrated that there is insufficient research concerning HRM practices and KS. The majority of the research have investigated the relation between HRM practices and KM (Calopa, Horvat, & Kuzminski, 2015; Figueiredo, Pais, Monteiro, & Monico, 2016; Farhadi & Rezaee, 2017; Hislop, 2003; Zaim, Kcecli, Jaradat, & Kastrati, 2018). Whereas studies about HRM practices and KS in higher education institutions and university's faculty members is inadequate (Lu, Leung, & Koch, 2006; Jain, Sandhu & Sidhu, 2007; Li, Li, & Li, 2008; Lou, Yang, Shih & Tseng, 2007).

2.1 Human resource management practices

HRM is described as the ability to achieve an organization's goals and objectives by effectively managing and improving its employees' skills (Stone, 2009). Quresh, Akbar, Khan, Sheikh, & Hijazi (2010) stated five vital elements of HRM functions: compensation and benefits, performance appraisal, staffing, training and development, and employee involvement. In addition, Mathis and Jackson (2006) indicated that HRM is a systematic approach that effectively identifies and utilizes an individual's skills and competences to attain the organization's objectives. HRM practices include training, staffing, compensation, human resource planning, health and safety, performance management, and evaluation. The current study explores three practices of HRM (training, compensation, and staffing) as follows:

2.1.1 Training

The first HRM practice in this research is training. An organization can achieve its current and future goals by providing regular training programs for its employees (Peteraf, 1993). One of training objectives is to develop the employee's knowledge, skills, and attitudes (KSA). Bratton and Gold (2012) illustrated the significance of training as an instrument to sustain employees' competences and to develop new skills. Training programs assist the company to enhance its employee's performance and overcome any skills deficits and ineffectiveness (Armstrong, 2001). Valle, Castillo, & Rodrigues-Duarte (2009) clarified that training programs increase organization

performance; Ipe (2003) asserted that employing a training program helps workers exchange and share knowledge, regardless of whether the training program is face-to-face or online. Delivering training programs for existing and new employees enhances the feeling of loyalty and ownership for employees (Sisson & Storey, 2009). Ramirez and Li (2009) demonstrated that knowledge sharing can be accelerated when employees participate in external training by vendors of new software, program, or equipment. Given the above clarification, the first hypothesis is formulated as:

H1: Training has a statistically significant association with knowledge sharing among academics.

2.1.2 Compensation

The second HRM practice is compensation. A corporation's compensation system should attract new applicants and maintain existing workers. Moreover, the reward system can be considered as influencer for workers, inspiring them to accomplish their duties and help the corporation achieve its objectives (Pagell, 2004). Brown (1989) categorized compensation systems based on worker performance, skills and competencies, knowledge, and productivity. Patton (1977) described that the compensation system should be fair, impartial, and encouraging for the employees, while Anderson, Finkelstein, & Quinn (1996) asserted the significance of the compensation system to be sufficient and accepted by the workers to encourage them to complete their tasks and share knowledge. Ooi, Teh, & Chong (2009) concluded that workers are motivated to share knowledge among each other when the organization designs the right compensation system. Compensation can be monetary, such as an increase in salary, or non-monetary, such as insurance coverage or promotions. However, a worker may not share knowledge to gain advantages over other workers. Hence, the corporation should create a compensation system that inspires workers to share knowledge while concurrently rewarding the workers who share knowledge. Based on the above explanation, the second hypothesis is proposed as:

H2: Compensation has statistically significant association with knowledge sharing among academics.

2.1.3 Staffing

The third HRM practice in this study is staffing. Employing the right nominee is crucial because it is the cornerstone of the other HRM practices and the company's overall performance. Staffing can be defined as attracting, finding, and encouraging candidates to apply to current and upcoming employment openings (Dessler, 2007). Terpstra and Rozell (1993) highlighted the importance of staffing because of the relationship between achieving the company's objectives and goals, and hiring the right person to achieve them. In other words, it is the practice of obtaining talented and qualified individuals for current employment. Selection is the process of choosing a skilled and competent person for the job, i.e., one who can achieve the organization's goals (Dessler, 2007). Chatman (1989) posited that the staffing process should conform with the company's culture. The process should satisfy the person-organization (P-O) concept. The P-O means that the applicant's culture, value, and principles correspond with the organization's values and culture. KS for staffing includes two major components. The first component is simply the condition that the candidate has a positive attitude to share knowledge with other employees. Therefore, the staffing process should implement strategies and methods that involve KS and ensure that the new employee has the required attitude for sharing knowledge. The second component is that the staffing process for a specific type of job should be done through collaboration between the HRM department and the division needing the new employee. Thus, this element is based on the concept of sharing knowledge. Currie & Kerrin (2003) pointed out that staffing procedure can impact the level of KS among workers from different departments. The above clarification generates the third hypothesis of the present paper:

H3: Staffing has a statistically significant association with knowledge sharing among academics.

2.2 Knowledge sharing

Knowledge sharing is considered a vital element of knowledge and gives an organization a maintainable competitive advantage (Davenport & Prusak, 1998; Stewart, 1997; Ford, 2004; Shin, 2004). Wang and Noe (2010) defined KS as the process of exchanging knowledge to create new ideas, solving problems, and establishing policies by mastering know-how, obtaining the information required to complete tasks, and ensuring cooperation between employees. Knowledge assists in making decisions and is an intangible asset that dwells in the minds of individuals. Tacit knowledge can be transferred to explicit knowledge only if the organization encourages employees to share knowledge and implements the appropriate environment to code, store, and transfer knowledge

(Steyn, 2003). Santo (2005) stressed that the organization's culture is vigorous element for encouraging sharing and storing knowledge. In addition, authority, gender differences, technology, and organization culture are considered barriers to KS (Riege, 2005).

Lin (2007a) outlined three motivational factors that encourage employees to share knowledge: knowledge self-efficacy, mutual benefits, and indulgence in helping others. Moreover, there are three stages of KS: pursuing knowledge, probing knowledge, and willingness to transfer knowledge (Hansen, Mors, & Lavas, 2005). Cabrera and Cabrera (2005) emphasized the importance of selecting appropriate HRM practices to encourage employees share knowledge, and found that staffing, compensation, training and development, and performance evaluation were the most significant HRM practices to escalate knowledge sharing among employees in a corporation. Seonghee and Boryung (2008) found that the perception of sharing knowledge and incentives were the most significant factors for academics to share knowledge. A study by Jain, Sandhu, & Sidhu (2007) found that academic staff highlighted the importance of knowledge sharing among colleagues; however, they indicated that a lack of activities, time, incentives, and recognition were the most significant obstacles to knowledge sharing. Figure 1 describes the study model and hypotheses.

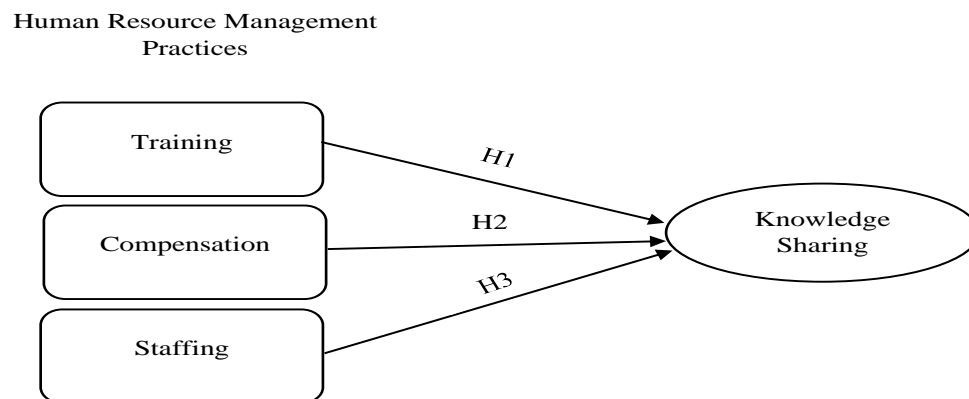


Fig. 1. The Study model and hypotheses

3. METHODOLOGY

3.1 Data collection

The purpose of this study is to investigate the association between HRM practices (training, compensation, and staffing) and KS at the College of Business in University of Jeddah. The population of the study was 180 academics at the College of Business. The unit of analysis was all academics (male and female) at the college. The study used Google Docs tools to collect data by submitting online questionnaires to the participants either by email or phone applications; participants were selected for the survey randomly. A cover letter was provided at the beginning of the survey explaining the purpose and objectives of the study.

The first part of the questionnaire focused on collecting general demographic data: gender, age, managerial position, job title, year of teaching in higher education institution, college, university branches, and employment status. The second part concentrated on questions to collect data about the variables of the research, i.e., the HRM practices (training, compensation, and staffing) and KS variable. A five-point Likert scale was applied in the questionnaire: 1= strongly disagree, 2= disagree, 3= neither disagree nor agree, 4= agree, 5= strongly agree. The questionnaire was test piloted on 30 members of the College of Business and Faculty of Science and Arts to make sure that the questions measured what they were supposed to measure. Following this, the questionnaire was revised and the final questions for survey were as follows: four questions related to training, six questions about staffing, five questions regarding compensation, and five questions regarding KS. A total of 69 questionnaires were returned.

4. RESUTLS

4.1 Demographics of participants

Table 1. Demographics of participants			
No.	Attributes	Frequency	%
Age			
1	Under 30 years old	3	4.3
2	30 – 35 years old	16	23.2
3	36 – 40 years old	20	29.0
4	Above 40 years old	30	43.5
Gender			
1	Male	37	53.6
2	Female	32	46.4
Teaching experience			
1	0 – 5 years	20	29.0
2	6 – 10 years	18	26.1
3	11 – 15 years	14	20.3
4	Above 15 years	17	24.6
Job title			
1	Professor	1	1.4
2	Associate Professor	4	5.8
3	Assistant Professor	45	65.2
4	Lecturer	17	24.6
5	Assistant	2	2.9
Employment status			
1	Official	27	39.1
2	Contract	42	60.9

Table 1 illustrated that the number of official academics was 27 (39.1%) and the contract academics were 42 (60.9%). The number of female participants in the study was 32 (46.4%) compared to the male participants which was 37 (53.6%). Out of the 69 participants in this study, 30 (43.5%) were aged above 40 years. It also can be noted from Table 1 that 20 (29 %) participants had between 0-5 years teaching experience; 45 (65.2%) were assistant professor.

4.2 Reliability and validity

To test the goodness of the measures, the study examined the reliability and validity. Sekaran and Bougie (2016) asserted that the purpose of the reliability analysis is to check the stability of the variables in the study; the reliability is considered high, when the result of Cronbach's alpha is near 1. Sekaran and Bougie (2016) explained that the value of reliability that is less than 0.60 consider poor, values in 0.70 span consider appropriate, and values above 0.80 consider great. The reliability values predicted by Cronbach's alpha (CA) were used to assess the degree to which items were free from random error, and, therefore, allowed to yield consistent results. The CA values ranged from 0.70 to 0.89 as shown in Table 2, fitting within the Cronbach's alpha range. For validity, the study used the content validity. Sekaran and Bougie (2016) explained that the purpose of content validity is to verify that the measure used in the study consist of a suitable and illustrative set of elements that focused on the perception of the study. In other words, how good the elements of the concept were outlined to represent the variables of the study. Therefore, the questionnaire was evaluated by a group of professors from the College of Business (Sekaran & Bougie, 2016); following that, the questionnaire was revised, and the final questions were as follows: four questions related to training, six questions about staffing, five questions concerning compensation, and five questions about KS. A total of 69 questionnaires were returned.

Table 2. The Cronbach's alpha result	
Variables	Cronbach's Alpha
Compensation	0.70
Training	0.82
Knowledge sharing	0.83

Staffing	0.89
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4.3 Hypotheses testing

Reviewing the literature review, the study anticipated that the HRM practice (training, compensation, staffing) can have an association with knowledge sharing among academics. In this context, the study aims to find out whether the practices of HRM might result in sharing or not sharing knowledge among academics. To achieve the study purpose, the study tested the following hypotheses:

H1: Training has a statistically significant association with knowledge sharing among academics.

H2: Compensation has a statistically significant association with knowledge sharing among academics.

H3: Staffing has a statistically significant association with knowledge sharing among academics.

To test the hypotheses, the study used the Statical Package for Social Sciences (SPSS) in specific utilized the Multiple Regression to test whether there is an association or relationship between the HRM practices(training, compensation, staffing) and knowledge sharing. Table 3 explains the model summary results for the association between the training, compensation, staffing, and knowledge sharing among academics. The R square value is greater than zero. Therefore, the test is significant, and the regression is significant. The value of the R square illustrates the degree to which the HRM practices explained the variation in sharing knowledge. The R square value is (0.693), which indicates that training, compensation, and staffing associated with knowledge sharing by 69.3 percent. Thus, the predictors are able to account for a significant amount of variance in knowledge sharing. In other words, 69.3 percent of knowledge sharing among academics has to do with HRM practices (training, compensation, and staffing).

Table 3. Test the significance of regression model for HRM practices and knowledge sharing.

Model	R^a	R^2	Adjusted R^2	Std. Error of the Estimate
1	.832	.693	.679	.56673

a. Predictors: (Constant), training, compensation, staffing

Table 4 demonstrates that the ANOVA for the regression is statistically significant at the level of alpha (α) < 0.05. In addition, the value of the statistic F is (48.904) which greater than the critical F (2.75) and the p-value is (.000) less than (0.05) which indicates that the regression model is significant (F= 48.904, P<0.05, R²=.693). In other words, the overall regression analysis was statistically significant when all predictors (training, compensation, and staffing) together as group predict knowledge sharing significantly.

Table 4. ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.123	3	15.708	48.904	.000 ^a
	Residual	20.877	65	.321		
	Total	68.000	68			

a. Predictors: (Constant), training, compensation, staffing

b. Dependent variable: Knowledge sharing

Table 5. Coefficients

	Unstandardized Coefficients		Standardized Coefficients	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta		Lower Bound	Upper Bound
1 (Constant)	2.184E-17	.069	-.004	1.000	-.138	.137
Training	.502	.094	-.007	.001	.315	.691
Compensation	.230	.097	.010	.023	.072	.448
Staffing	.225	.097	-.001	.033	.012	.413

b. Dependent variable: Knowledge sharing

Table 5 demonstrates that the HRM practices (training, compensation, staffing) are associated significantly with knowledge sharing. The p-value for the HRM practices were (.001,.023,.033) respectively, which is less than 0.05. In other words, training, compensation, and staffing are statistically significant and the three hypotheses were accepted. Therefore, the association between the HRM practices (training, compensation, staffing) are associated with knowledge sharing significantly and these HRM practices indeed effect the level of sharing knowledge among academics.

5. DISCUSSION

The findings of this research revealed that the three practices of the HRM included in this study have a significant association with KS among academics. The results disclose that training has significant association with knowledge sharing. This result is consistent with the results of (Ipe, 2003; Ramirez & Li, 2009). Training delivers an opportunity for academics to harvest and share knowledge, particularly when implementing new system, software or attending seminars or workshops. In addition, online training could improve the level of knowledge sharing. Training encourages academics to share knowledge and generate new ideas that could enrich teaching strategies or core curriculum. Finally, training offers a strong opportunity for senior professors and faculty members to share experiences and knowledge. Therefore, the College of Business should utilize training programs that support academics from different colleges and branches to share knowledge and experiences; the university should also recognize the importance of training for KS.

This research also reveals a significant association between compensation and KS. This result is consistent with the finding of Ooi et al., 2009; i.e., that designing the right compensation system encourages employees to share knowledge. In the case of the College of Business, academics find the compensation system (monetary and non-monetary) fair and impartial and that it urges faculty members to share knowledge.

Finally, the study results reveal that there is a significant association between staffing and KS. This result illustrates the importance of the findings of (Fong, Ooi, Tan, Lee, & Chong, 2011; Manafi & Subramaniam, 2015) ; i.e., the staffing has an association with knowledge sharing and have positive effect in sharing knowledge. The staffing of an employees or academics must involve KS; this is seen in the case of the College of Business. In other words, the staffing procedures should involve the suitable department to take decision for what kind of individual that it needs and to engage faculty members in designing the pre-employment tests. Furthermore, job interview for candidate should be done through collaboration between the specific college division and human resource department.

6. LIMITATIONS AND FUTURE RESEARCH

The present study had several shortcomings that can be considered to recommend future research. First, the sample was drawn from academics working at the College of Business. Hence, a future investigation could use samples from different universities in Saudi Arabia to examine the level of influence that HRM practices have on the level

of KS across universities. In addition, researchers could examine the level of KS between male and female academics and between teachers and their students.

Second, because of the lack of current research and measurements for HRM practices and KS, the current study and the methods used to explain the association between HRM practices and KS are considered as introductory and focused on only three HRM practices. Future investigation could focus on increasing the number of HRM practices to also include performance appraisal, teamwork, and organizational behavior.

Third, most of the participants were from the College of Business even though the questionnaire was sent using the official email address for academics at the University of Jeddah. Therefore, a future study may use both an online and paper questionnaire to ensure a high number of respondents and include more diverse faculty members. Finally, this study only used a questionnaire to collect data. Further studies exploring the connection between HRM practices and KS could include interviews of academics, deans, deputies, and department heads from different colleges and universities.

7. CONCLUSION AND RECOMMENDATIONS

In conclusion, the main objective of this research was to examine the association between specific HRM practices (training, compensation, and staffing) and KS among academics working at the University of Jeddah. Reviewing the literature of HRM practices and KS showed that there is little focus on HRM practices and KS in higher education institutions, which emphasizes the major contribution of this research to the understanding of the association between HRM practices and KS in higher education institutions. This research disclosed that there is a statistically significant association between training, compensation, and staffing, and KS. The findings of this study provide some of the recommendation that universities could utilize to increase KS among academics. First, training showed a significant relationship with KS, which suggests that management should provide training programs (whether face-to-face or online). Second, the relationship between compensation and KS illustrates that faculty members are willing to share knowledge if they consider the compensation system as fair. Therefore, management in universities should maintain an attractive compensation system and reward academics who share knowledge. The final and most important recommendation of this study is how to maintain and increase KS among academics in the university. There are two types of academic staff at the University of Jeddah, i.e., official and contract, the latter of which are not from Saudi Arabia. It is best to design a system or platform to allow academic staff (official and contract) to share knowledge with colleagues, in general, or after attending conferences, seminars, and workshops. In addition, the purpose of the design proposed below is to store, maintain, and transfer knowledge.

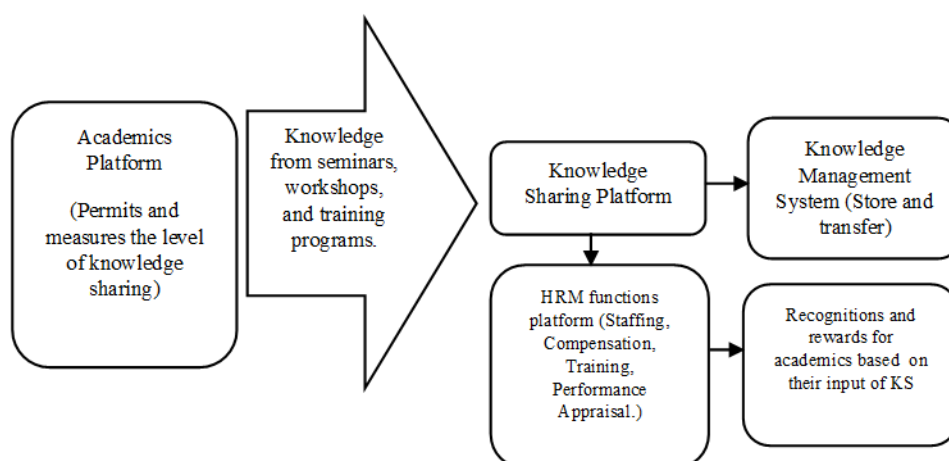


Fig. 2. The proposed model to increase the level of KS.

Figure 2 suggests a model for universities to use to encourage academic staff to share knowledge, between official and contract academic staff. The model also addresses how the university should store, maintain, and transfer knowledge when needed by having a sophisticated knowledge management system. Figure 2 starts with the

implementation of the academics' platform that allows members of the university to access the platform and to measures the percentage of sharing knowledge by academics. The shared knowledge should be registered, stored, and maintained in knowledge management system.

References

- Adhikari, D. R. (2010). Knowledge management in academic institutions. *International Journal of Educational Management*, 22(2), 94-104.
- Anderson, P., Finkelstein, S., & Quinn, J. B. (1996). Managing professional intellect: Making the most of the best. *Harvard Business Review*, 74(2), 71-80.
- Anwar, S., & Prasad, K. D. (2011). Factors influencing knowledge sharing behaviors: Developing a theoretical framework. *International Journal of Management Prudence*, 3(2), 7-11.
- Armstrong, M. (2000). The name has changed but has the game remained the same? *Employee Relations*, 22(6), 576-593.
- Armstrong, M. (2001). A handbook of human resource practice (8th ed.). Kogan Page.
- Bock, G. W., Zmud, R. W., Kim, Y. G., & Lee, J-N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 29(1), 87-111.
- Bratton, J., & Gold, J. (2012). *Human resource management: Theory and practice* (5th ed.). Palgrave Macmillan.
- Brown, W. (1989). Managing remuneration. *Personnel Management in Britain*, Blackwell, Oxford, pp. 249-270.
- Cabrera, E. F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *International Journal of Human Resource Management*, 16(5), 720-735.
- Calopa, M, Horvat, J., & Kuzminski, L. (2015). The role of human resource management practice mediated by knowledge management (study on companies from ICT sector, Croatia). *TEM Journal*, 4(2), 178-186.
- Chatman, J. A. (1989). Matching people and organization: Selection and socialization in public accounting firms. *Administrative Science Quarterly*, 1989(1), 199-203.
- Currie, G., & Kerrin, M. (2003). Human resource management and knowledge management: Enhancing knowledge sharing in a pharmaceutical company. *The International Journal of Human Resource Management*, 14(6), 1027-1045.
- Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Harvard Business School Press.
- Dessler, G. (2007). *Human resource management* (11th ed.). Pearson/Prentice Hall.
- Dessler, G. (2011). *Fundamentals of human resource management*. Pearson Higher Ed.
- Drucker, P. (1999). Knowledge worker productivity: the biggest challenge", *California Management Review*, 41(2), 79-105.
- Farhadi, A., & Rezaee, M. (2017). The relationship between human resource management and knowledge management with corporate social responsibility. *Journal of Economic & Management Perspectives*, 11(3), 625-636.
- Figueiredo, E., Pais, L., Monteiro, S., & Mónico, L. (2016). Human resource management impact on knowledge management. *Journal of Service Theory and Practice*, 26 (4), 497-528.

- Fong, C. Y., Ooi, K.B., Tan, B. L., Lee, V.H., & Chong, A. Y. L. (2011). HRM practices and knowledge sharing: An empirical study. *International Journal of Manpower*, 32(5/6), 704-723.
- Ford, D. (2004). *Knowledge sharing: Seeking to understand intention and actual sharing*. [unpublished doctoral dissertation]. Queen's University.
- Fullwood, R., Rowley, J., & Delbridge, R. (2013). Knowledge sharing amongst academics in UK universities", *Journal of Knowledge Management*, 17(1), 123-136.
- Hansen, M. T., Mors, L., & Lavas, B. (2005). Knowledge sharing in organizations: Multiple networks, multiple phases. *Academy of Management Journal*, 48(5), 776-793.
- Hatch, N. W., & Dyer, J. H. (2004). Human capital and learning as a source of sustainable competitive advantage", *Strategic Management Journal*, 25(12), 1155-1178.
- Hislop, D. (2003). Linking human resource management and knowledge management via commitment: A review and research agenda. *Employee Relations*, 25(1), 182-202.
- Hislop, D. (2005). *Knowledge management in organization: A Critical introduction*. Oxford University Press.
- Ipe, M. (2003). Knowledge sharing in organizations: A conceptual framework. *Human Resource Development Review*, 2(4), 337-359.
- Jain, K. K., Sandhu, M. S., & Sidhu, G. K. (2007). Knowledge sharing among academic staff: A case study of business schools in Klang Valley, Malaysia. *Journal for the Advancement of Science and Arts*, 2(1), 23-29.
- Li, Z., Li, M., & Li, J. (2008). An empirical research on the influencing factors of knowledge sharing willingness among virtual community members. *IEEE Explore Digital Library*, 10(2), 158-169.
- Lin, H. F. (2007a). Knowledge sharing and firm innovation capability: An empirical study. *International Journal of Manpower*, 28(3/4), 315-332.
- Lou, S. J., Yang, Y. S., Shih, R. C., & Tseng, K. H. (2007). A study on the knowledge sharing behaviour of information management instructors at technological universities in Taiwan. *World Transactions on Engineering and Technology Education*, 6(1), 143-149.
- Lu, L., Leung, K., & Koch, P. T. (2006). Managerial knowledge sharing, the role of individual, interpersonal, and organizational factors. *Management and Organization Review*, 2 (1), 15-41.
- Mathis, R. L., & Jackson, J. H. (2006). *Human resource management: Manajemen sumber daya manusia*. Terjemahan Dian Angelia, Jakarta, Salemba Empat.
- Manafi, M., & Subramaniam, I. D. (2015). The role of the perceived justice in the relationship between human resource management practices and knowledge sharing: A study of Malaysian university lecturers. *Asian Social Science*, 11(12), 131-143.
- Nonaka, L. (1995). *The Knowledge creating company*. Oxford University Press.
- Ooi, K. B., Teh, P. L., & Chong, A. Y. L. (2009). Developing an integrated model of TQM and HRM on KM activities. *Management Research News*, 32(5), 477-490.
- Pagell, M. (2004). Understanding the factors that enable and inhibit the integration of operations, Purchasing and logistics. *Journal of Operations management*, 22(5), 459-487.
- Patton, T.(1977). *Pay*. Free Press.

- Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based View. *Strategic Management Journal*, 14(3), 179–191.
- Prabowo, H. (2010). Knowledge management di Perguruan Tinggi, *Binus Business Review*, 12(2), 407-415.
- Quresh, T. M., Akbar, A., Khan, M. A., Sheikh, R. A., & Hijazi, S. T. (2010). Do human resource management practices have an impact on financial performance of banks? *African journal of business management*, 4(7), 1281-1288.
- Ramirez, M., & Li, X. (2009). Learning and sharing in a Chinese high-technology cluster: A study of inter-firm and intra-firm knowledge flows between R&D employees. *New Technology, Work and Employment*, 24(3), 277-296.
- Randhawa, G. (2007). *Human resource management*. Atlantic Publishers and Distributors.
- Riege, A. (2005). Three-dozen Knowledge-sharing Barriers Managers Must Consider. *Journal of Knowledge Management*, 9(3), 18-35.
- Santo, S. A. (2005). Knowledge management: An imperative for schools of education. *TechTrends*, 49(6), 42–49.
- Seonghee, K., & Boryung, J. (2008). An analysis of faculty perceptions: Attitudes toward knowledge sharing and collaboration in an academic institution. *Library and Information Science Research*, 30(4), 282-290.
- Shin, M. (2004). A framework for evaluating economies of knowledge management systems. *Information and Management*, 42(1), 176-196.
- Sisson, K., & Storey, J. (2000). *The Realities of Human resource management: Managing the employment relationship*. The Open University Press.
- Stewart, T. A. (1997). *Intellectual capital: The new wealth of organization*. Doubleday.
- Steyn, G. M. (2003). Creating knowledge through management education a case study of human resource management. *Education*, 123(3), 514–536.
- Stone, R. J. (2009). *Managing human resources: An Asian perspective* (1st ed.). John Wiley & Sons, Milton
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill-building approach* (7th ed.). John Wiley & Sons Ltd.
- Terpstra, D. E., & Rozell, E.J. (1993). The relationship of staffing practices to organizational level measures of performance. *Personnel Psychology*, 46(1), 27-48.
- Valle, ID. D., Castillo, M.A.S., & Rodriguez-Duarte, A. (2009). The effects of training on performance in service companies: A data panel study. *International Journal of Manpower*, 30(4), 393-407.
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 20(2), 115-131.
- Wei Chong, C., & Yen Yuen, Y., & Chew Gan, G. (2014). Knowledge sharing of academic staff: A comparison between private and public universities in Malaysia. *Library Review*, vol. 63(3). 203-223.
- Yang, J. T. (2004). Job-related knowledge sharing: comparative case studies. *Journal of Knowledge Management*, 8(3), 118-26
- Zaim, H., Keceli, Y., Jaradat, A., & Kastrati, S. (2018). The effects of knowledge management processes on human resource management. *Journal of Science and Technology Policy Management*, 9 (3), 310-328.