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The Role of the Perceived Justice in the Relationship between Human Resource Management Practices and Knowledge Sharing: A Study of Malaysian Universities Lecturers

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1. Introduction

Knowledge sharing is one of the important factors in knowledge-based industries due to the fact that knowledge sharing can result in knowledge creation (Noanaka, Umemoto, & Seonoo, 1996) and innovation (Kamsak & Bulutlar, 2010; Wang & Wang, 2012). Thus, by considering that innovation can impact different dimensions of performance (financial and non-financial), (Cohen, 2010), increasing knowledge sharing is one of the necessities in any type of company. Knowledge sharing can be relevant to individual tendency for donating and collecting knowledge (Van Den Hoof & De Ridder, 2004)

Different researches have been conducted about influential factors on knowledge sharing. Such researches have emphasized on environmental factors, motivational factors, individual factors, etc. (Wang & Noe, 2010; Li & Poon, 2011) that among such factors, many different theories such as social capital, resource-based review (RBV) and social exchange can be observed. Through narrowing these factors according to available concepts in human resource management (HRM) and organizational behavior, HRM practices have key role on increasing knowledge sharing. HRM practices have strategic contribution (Lengnick-Hall, Lengnick-Hall, Andrade, & Drake, 2009) as well as previous researches (Huselid, 1995; Wright, Gardner, & Moynihan, 2003; Chen & Huang, 2009) regarding RBV theory have the capability to impact employee behavior in case of sharing knowledge. Fong, Ooi, Tan, and Lee (2011), studied impact of HRM practices (training, staffing, performance appraisal, team work and reward) on knowledge sharing as gap of previous researches. Results demonstrated that HRM practices have a key role on improving knowledge sharing.

If we consider talent as one of the knowledge resources or as a scope for dependent researches to impact of talent on sharing knowledge, so according to conducted research by Gelen et al. (2013) role of justice will be highlighted in case of relationship between HRM practices and knowledge sharing. It will result to the fact that existed interaction between equity theory (Pritchard, 1969) and underlying theories of researches will become important. There was little focus about this subject in previous researches. However, Khanmohammdi (2014) also emphasized on moderating role of justice in case of relationship between IT, management support, training and reward and knowledge sharing.

Universities of Malaysia currently attempt to improve their position in global ranking. One of the helpful aspects for improving scientific level of universities is utilizing of high potential of lecturers. In this regard, improving knowledge sharing level among lecturers results in science creation (Khanomohammadi, 2014).

Through considering lecturers as talents and also importance of knowledge sharing among them, it is necessary to clarify role of HRM practices and justice. Hence, this research aims to examine what is the relationship between HRM practices, perceived justice, and knowledge sharing in the Malaysian universities.

2. Hypotheses Development

2.1 HRM Practices and Knowledge Sharing

Different HRM practices have been utilized by many famous researchers. Most of these researches attempted to demonstrate the fact that effective implementation of HRM practices can impact employee performance (Khatibi, Asgharian, Seyed, & Manafi, 2012; Saif & Satrawi, 2013) and organizational performance (Huselid, 1995;

Wright et al., 2003; Snape & Redman, 2010). Most helpful HRM practices are training, staffing, performance appraisal and reward and compensation. In most of researches impact of HRM practices on performance have been supported by RBV theory (Barney, 1996). However, other relevant theories exists which will be discussed in following sections.

2.1.1 Training

Based on statements of Noe, Hollenbeck, Gerhart, and Noe (2008) and Masood (2010), training is known as a well planned attempt which is designed by company in order to assist its members in process of learning for competencies which are job related for example skills, knowledge behaviors which are crucial for job performance of individuals to be successful. Moreover, development is formal education, enhancement of job experience, personality assessment and those abilities which contribute employees to be prepared in future (Noe et al., 2008).Activities related to training have positive impact on organizational performance (Valle et al., 2009). Training is critical in knowledge sharing context because employees have a chance to exchange ideas and information for formal sessions of training or existed informal interactions among two or more persons (Ipe, 2003).

Besides formal training, learning and informal training are also critical in case of sharing knowledge as mentioned by Ramirez and Li (2009) who asserted that "external learning occurs while staffs are communicating with supply chain". Also knowledge transfer can take place via suppliers while staffs are undergoing training in order to use modern and new equipment. In turn employees will teach their customers. This can be considered as an example of sharing knowledge and teaching (Ramirez & Li, 2009). Bottom line is a training which can contribute for dealing with obstacles in sharing knowledge process for example lack of motivation in learners, integration capability and low absorption capacity (Rhodes et al., 2008).

In research conducted by Low and Mohammed (2005), Fong et al. (2011) Asgharian et al. (2013) and Khanmohammadi (2014) training was considered as one of the influential factors on knowledge sharing. Lecturers in universities can be trained and become familiar with knowledge sharing advantages in order to become more interested to donate and collect knowledge. Therefore, the first hypothesis of this research is as follows:

H1: Training has a significant and positive impact on knowledge sharing

2.1.2 Staffing

In any organization recruitment and selection are two core activities of HRM staffing function done in order to achieve proper quality and quantity employees. A firm which is recruiting in general will attempt to match knowledge, skills and attitudes of candidates (KSAs) to the requirements and specifications of position or job (Chatman, 1991).

The person who recruits communicates to all the candidates about job specification and job description for the offered position to attract those qualified applicants. Moreover, recruiters should make sure that there exist person-organization (P-O) fit among candidate and firm where beliefs, values and candidate's characteristics are aligned with organizational culture and environment of the firm (Chatman, 1991).

When P-O fit of new employee is consistent with new working context and relationship then high teamwork and individual performance will be expected which in turn results in better total organizational performance (Goodman & Svyantek, 1999). The better the P-O fit, the faster the new employees will adapt to new working context and knowledge interchange between new and old members of organization will occur (Chatman, 1991). This contributes to improve competitive edge of an organization.

Inside a firm which focuses on knowledge sharing, P-O fit is important since the original characteristics and values of new recruit has to embrace sharing knowledge too for reinforcing the dominant culture of sharing knowledge emphasized in the organization. Case study developed by Currie and Kerrin (2003) demonstrated the consequences of an improper process of selection in increasing sharing knowledge complexity between employees from various functional units. Because of the fact that selecting the right candidate who has knowledge sharing perception in common, is remarkably important so recruitment approaches employed has to enable the organization to attract those candidates who have inclination for knowledge sharing, e.g. process of recruitment seeks for outward and positive looking staffs who are interested to contribute to organization's collective goals. All the selection tools, methods and test methods utilized in process of selection such as background check, interview need to be designed very carefully to make sure reliability and validity for choosing pro-sharing knowledge employee. Therefore, recruitment and selection are considered to be related to knowledge sharing process.

The other factor which can be considered in staffing is diversity. Diversity can be related to race, gender and expertise (Ojha, 2005; Sawng et al., 2006; Wang & Noe, 2010). Fong et al. (2011) realized that recruitment and selection has positive and significant impact on knowledge sharing in service and manufacturing industry of Malaysia. Hence, staffing can be assumed as another factor which has potential to influence knowledge sharing of lecturers. Moreover, since Malaysia is a multiracial country so diversity is very important in this country. This subject has been highly emphasized and discussed research conducted by Fong et al. (2011). So staffing could influence knowledge sharing.

H2: Staffing has a significant and positive impact on knowledge sharing

2.1.3 Reward and Compensation

Based on motivation theories developed by Robbins and DeCenzo (2008), reward and compensation strengthen motivation for employees' well improved individual performance. Such employees will be expected to repeat positive behavior again because of obtaining recognition and reward provided by organization. Therefore, organizations utilize rewards and compensation as tools for enhancing, eliciting and maintaining desired behavior of knowledge sharing between employees. The importance of motivational factors in improving knowledge sharing is also consistent with conducted research by Li and Poon (2011).

According to implemented reward and compensation programs by organization, it can be realized that incentives and compensation are critical practices related to knowledge sharing process (Zarraga & Bonache, 2003). If an appropriate reward system is being installed then employees inside the organization will be motivated to share knowledge with each other (Ooi, Teh, & Chong, 2009).

Unfortunately few organizations did a good job in case of administering a suitable compensation system for their members to generate favorable behaviors inside the organization (Fong et al., 2011). Many researchers have demonstrated that reward for individuals can restrain information sharing between employees and minimizing occurrence of transferring knowledge inside organization (Quinn, Anderson, & Filkenstein, 1996). It will divert emphasize of employees from organizational and collective performance as whole, result in high conflict among these knowledge sharing programs and focus narrow practices on collaboration, communication and innovation. In addition, employees are not interested to share knowledge and as a result "silos of knowledge" will be formed (Goh, 2002). In this occasion employees will keep their knowledge and consider it as a weapon in order to compete with other peers in case of work performance. Obviously, the mentioned phenomena will acts against practices of knowledge sharing inside organization. It is better that firm reestablish another type of compensation system that concentrates on group-based compensation for stimulating knowledge sharing and exchange between members of firm (Yahya & Goh, 2002). Conducted researches by Wang and Noe (2010), Asgharian et al. (2012), Wei et al. (2012), and Khanmohammadi (2014) emphasized on important role of reward system on knowledge sharing. Thus, universities can use reward system in order to improve level of knowledge sharing among lecturers and it can be measured through conducting mutual researches.

H3: Reward and compensation has a significant and positive impact on knowledge sharing

2.1.4 Performance Appraisal

Performance appraisal (PA) is known as formal system of evaluating and reviewing team or individual task performance (Mondy, 2010). An appraisal system which is effective can evaluate work performance accomplishments and also collected information used for recruitment, development and training, internal relation of employees and compensation (Mondy, 2010). Konovsky and Cropanzano (1991) demonstrated that when employees inside organization perceive that there is a fair performance appraisal inside organization so they will have positive perspective about organization and it can improve their total commitment into organization.

Jaw and Liu (2003) suggested that it is necessary for companies to present outcomes of performance appraisal to employees and therefore empower remedy actions for those employees who did not perform well. Hence, a system of performance appraisal can be a positive force for employees to have better performance by means of more knowledge sharing to each other. Thus, it is crucial to review impacts of performance appraisal on behavior of knowledge sharing (Fong et al., 2011).

Wang and Noe (2010) emphasized on appraisal apprehension as another important factor which can increase knowledge sharing. However, Fong et al. (2011) asserted that performance appraisal has positive and significant impact on knowledge sharing. If universities consider desire to share knowledge in lecturers for evaluating their performance so it might result in increase of knowledge sharing.

H4: Performance appraisal has a significant impact on knowledge sharing

2.1.5 Team Work/Participation

According to Katzenbach and Smith (1993), team is made of a small assembly of individuals who have various skills which can be complementary to each other to achieve a mutual goal. Teamwork happens when members in a group closely and together reach an objective. Since sharing knowledge refers to communicating ideas and information between employees so it can be motivated by developing working teams in firms.

In addition, according to Lim and Klein (2006) cohesive teams have those members who have similar ideas, beliefs and norms about the fact that how members should behave. In case of knowledge sharing, those teams which are cohesive with sharing knowledge value will assume knowledge sharing as "conduct code" of team. Such behavior which is self-regulated in team will makes team members to be able to share knowledge with other peers willingly. As noted by Goh (2002), in order to make knowledge sharing happen, as noted by working context of organization has to compromise those cooperative members.

Thus, it is important for an organization to nurture and generate a context for knowledge sharing to take place (Zarraga & Bonache, 2003). Experts have confidence that teamwork can be accomplished by means of HRM practices that provide an environment which motivates behaviors that result in overtime and trust and increases organizational knowledge sharing. Fong et al (2011) explained that teamwork has positive and significant impact on knowledge sharing. Moreover, Chen and Huang (2009) considered participation as one of the HRM practices which can impact innovation and knowledge management capacity. Knowledge sharing is considered as one of the knowledge management dimensions. Participation emphasizes on the fact that in different levels of decision making process, knowledge and experience of employees can be utilized. Therefore, it can be concluded that teamwork and participation together can better impact knowledge sharing. So, fifth hypothesis will be formulated as below:

H5: Teamwork and participation have a significant impact on knowledge sharing

2.2 Justice and Knowledge Sharing

Scholars have utilized social exchange theory in order to study how justice, as a key aspect in interpersonal relationships, is related to knowledge sharing (Organ, 1990; Robinson, 1996). Justice is crucial to knowledge sharing as it includes both giving knowledge and collecting knowledge in a community or team of practice with reciprocity expectations (Wu, Hsu, & Yeh, 2007; Wang & Noe, 2010).

Knowledge-justice sharing relationship was not remarkably emphasized in previous researches even though the role of justice in impacting the quality of social exchange relationships among employees and employers is well-developed (Rupp & Cropanzano, 2002; Wang & Noe, 2010). Schepers and Van den Berg (2007) realized that perceived procedural justice has positive relationship with knowledge sharing between employees. Employing part-time students of business administration in Taiwan, Lin (2007) realized that both procedural and distributive justice had indirect and positive impact on tacit knowledge sharing by means of organizational commitment and on the other side distributive justice impacted knowledge sharing via trust of coworkers.

Researches conducted on equity theory (Thau & Mitchell, 2010; Chiu, Wang, Shih, & Fan, 2011) have demonstrated that perceived justice impacts human behavior especially in case of employees. However, Khanmohammadi (2014) believes that perceived justice can impact relationship between trust, individual attitude, and management support and reward system with knowledge sharing among university lecturers. This is consistent with results of research by Gelen et al. (2013) which emphasizes on the important role of perceived justice in the relationship between resource allocation and employee performance.

By the way, in case of relationship between justice and knowledge sharing of university lecturers, we can consider three aspects. First, those lecturers who have more perceived justice will have better performance and knowledge sharing as one of their responsibilities will be increased too. On the other hand, lecturers might use knowledge as a competitive advantage for themselves in comparison to their colleagues. This can decrease their interest and desire to donate and collect knowledge. Thirdly, justice plays a key role in implementing HRM practices such as workshops (training), reward system and recruitment. Therefore, perceived justice can impact outcomes of HRM practices.

Hence, this research develops its final hypothesis according to the moderating role of justice.

H6: Perceived justice moderates the relationship between HRM practices and knowledge sharing

H6a: Perceived justice moderates the relationship between training and knowledge sharing

H6b: Perceived justice moderates the relationship between staffing and knowledge sharing

H6c: Perceived justice moderates the relationship between reward and knowledge sharing

H6d: Perceived justice moderates the relationship between performance appraisal and knowledge sharing

H6e: Perceived justice moderates the relationship of team work & participation with knowledge sharing

3. Method

3.1 Instruments

All of the variables relevant to the hypothesizedmodel of this research and considering knowledge sharing have been identified based on previous studies. Van Den Hoof and De Ridder (2004) found that knowledge sharing can be relevant to individual tendency for donating and collecting knowledge. These two dimensions are appropriate for this study because current research focuses on knowledge sharing behavior of lecturers.

Questionnaire items to measure training, performance appraisal and training have been adapted from research instruments used by Fong et al. (2011) in his study. Items to measure recruitment and selection of staffs were drawn from instruments used by Masood (2010). Items from instrument developed by Chen and Huang (2009) were used to measure teamwork and participation. Perceived justice was measured usingitems drawn from instrument developed by Pérez-Arechaederra, Briones, Lind and García-Ortiz (2014). According to these studies justice includes 4 dimensions as distributive, procedural, interactional and information. Response were obtained using a five-point LikertScale which ranged from 1 = Strongly Disagree to 5 = Strongly Agree. The final survey instrument was obtained after a confirmatory factor analysis. The descriptive statistics for the questionnaire items are presented in Table 1.

Table 1. Descriptive Statistics

Variables	Mean	SD	Skewness	Kurtosis	Std. Loading
HRM practice					
Training					
Formal training activities are available in my university	3.710	1.12	1.121	-.104	.961
My university has comprehensive training policies and programs.	2.906	.88	-1.231	.103	.789
Training is available for new hires	3.41	1.02	.88	-.456	.694
Lecturers receive training throughout their professional lives	4.10	1.31	.236	-.409	.721
Our university conducts extensive training	2.9	.98	-.144	-.236	.541*
Training needs are identified through a formal need assessment mechanism	3.01	1.18	.123	1.091	.876
Employee training and development policies cover all the lecturers in the university	4.11	1.09	-.456	-1.05	.773
Staffing					
Recruitment & selection system followed in our university is well defined	2.98	.66	-.236	-.333	.660*
The recruitment and selection processes in this university are impartial	2.88	.89	1.891	1.03	.923
Valid and standardized tests are used in the selection process of lecturers.	3.24	1.22	-1.45	.66	.887
University employs lecturers with different races or genders	3.55	1.09	-.651	.89	.789
The organization uses assessment centers for selection	3.65	.84	-.333	1.22	.499*
Favoritism is not evident in any of the recruitment decisions made here	2.23	.76	1.330	1.09	.733
Interview panels are used during the recruitment and selection process in this organization	4.38	1.29	-1.341	.84	.867
Performance Appraisal					
Performance is measured on the basis of objectives and quantifiable results	3.23	.49	-1.101	-.651	.806
Appraisal system in our organization is growth and development oriented.	3.11	1.30	-1.231	-.76	.522*
Lecturers are provided performance based feedback and counseling.	2.79	1.11	-.84	-1.03	.456*
Appraisal system is unbiased and transparent	3.27	1.17	-.236	-.66	.899
Appraisal information is used for bonuses, promotions and	2.67	1.23	.144	-.89	.901

selecting training					
Everybody working in the university have clear understanding of the objectives of performance appraisal	3.14	1.09	-.123	-1.22	.785
Appraisal system has a strong influence on individual and team behavior	4.02	.82	-.840	-1.09	.689*
To evaluate lectures performance, tendency of lecturers to collect knowledge is considered	2.77	.70	-1.44	-.77	.666
To evaluate lectures performance, tendency of lecturers to donate knowledge is considered	2.92	.93	-.78	-.68	.729
Compensation					
Compensation offered by our universities matches the expectancy of the faculties.	3.43	.99	.79	-.79	.868
In our university, salary and other benefits are comparable to the market.	3.09	1.07	-.234	-.91	.944
In our university, compensation is decided on the basis of competence of the lecturers	4.22	1.33	1.29	-.88	.778
The compensation for all lecturers is directly linked to their performance.	3.78	1.16	1.65	-.101	.760
Our organization offers both financial and non-financial rewards without discrimination.	2.68	1.22	-1.44	-1.00	.804
The compensation plan is revised accordingly with the economic situation.	3.22	1.11	-1.36	-1.02	.821
The organization offers incentives to its employees related to their performance	3.33	1.43	1.47	-.99	.645*
Team Work and Participation					
Employees at each level in the university take part in decision-making process up to an extent	2.77	1.03	2.41	-.82	.479*
Lecturers are asked by superiors to participate in related decisions.	3.45	1.06	-1.26	-.81	.745
Lecturers are provided opportunity to suggest improvements in the way things are done here.	3.78	.98	-1.32	-.95	.856
Lecturers are trusted to make decisions for themselves and the university	3.19	.78	-.69	-.72	.678
Each team meets regularly and frequently to solve problems and explore opportunities in its area	3.43	.66	.96	-1.07	.676
We have a culture that promotes lecturer involvement in our university.	2.88	1.02	1.65	-.88	.885
Each team has developed a clearly defined charter/mission and operation guidelines	2.90	1.43	-1.02	.12	.551*
Our university consults lecturers in strategic decision-making.	2.84	1.45	-.73	-1.18	.521*
Knowledge Donating					
I share my knowledge with my colleagues when I have learnt something new.	3.42	.78	1.49	-.79	.924
My colleagues share with me when they have learnt new things	3.73	.56	1.31	-.91	.864
Knowledge sharing amongst colleagues is considered normal in my organization.	3.61	.66	-1.28	-.88	.706
Knowledge Collecting					
I am confident of my ability to access knowledge that the others in my learning environment would consider valuable	3.11	.87	1.22	-1.00	.867
I have the expertise required to acquire valuable knowledge from my learning environment	3.02	.86	1.43	-1.02	.955
Most of my colleagues can provide me with valuable knowledge.	3.44	1.01	-1.67	-.99	.923
Justice					

Outcome or distribution of resources that provides the same to everyone involved	3.26	1.12	1.15	-.91	.788
Outcome or distribution of resources that gives everyone what they require in their situation.	2.92	1.03	-1.52	-.88	.851
Procedure always applied in the same way	3.24	1.27	.77	-.101	.502*
Procedure that does not favor certain groups or individuals over others	3.02	.78	-.90	-1.00	.673
Procedure that is consistent with the current ethical rules	3.07	.99	-.44	-.79	.444*
Interaction by mean of respectful communications	3.41	.86	1.23	-.91	.694
Interaction that treats people politely	2.98	1.43	1.02	-.88	.809
Information that includes suitable explanations	3.09	.69	-1.66	-.101	.773*
Information provided free of faults	3.55	.89	.98	-1.00	.833
Truthful and forthright information	3.26	.71	.79	-1.02	.776

*: They are deleted after CFA

3.2 Participants and Procedures

A pilot study was carried out using a convenience sample of 30 university lecturers in order to test and refine the current research instrument. The main survey of research was conducted with lecturers from 9 public and private universities located in 5 cities of Malaysia (Kuala Lumpur, Serdang, Penang, Johor Bahru, and Shah Alam) from January to April 2014. Stratified sampling method has been employed based on the numbers of lecturers in each university. All lecturers had doctorate degrees in engineering, medical or social science. Table 2 demonstrates the distribution of questionnaires in the 9 mentioned universities.

Table 2. Distribution of questionnaires

Universities	Total Lecturers	Percentage	Sample Size
University 1 in KL	2200	11.23%	50
University 2 in KL	1980	10.11%	44
University 3 in KL	2600	13.3	59
University 1 in Serdang	2400	12.28	54
University 2 in Serdang	1100	5.61	25
University in Penang	2600	13.27	58
University in Shah Alam	2700	13.78	60
University 1 in Johor Bahru	2800	14.3	63
University 2 in Johor Bahru	1200	6.12	27
Total	19580	100%	440

From a total 440 questionnaires which were distributed to the respondents, 387 of them were usable (88.0%). The distribution of the respondents by gender was 209 or 54.0% male and 178 or 46.0% female. Above third of participants (n=148, 38.2%) belonged to age group from 30 to 40 years old and 30.2% were from 41 to 50 (n=148), 18.1% (n= 70) were from 51 years and above and finally 11.1% were below 30 years old which was equal to (n=43). Of the respondents, 36.17% (n= 140) had less than 10 years of teaching experience, 44.96% (n= 174) had between 11 to 20 years of experience while 18.86% (n= 73) had more than 21 years of teaching experience.

3.3 Statistical Analysis

The (SEM) Structural Equation Modeling method has been utilized to analyze the data of both structural model and measurement model in this research. SEM is considered as a statistical methodology which uses Confirmatory approach in order to analyze all of casual structural relationships (Byrne, 1998; Hair, Black, Babin, Anderson, & Tatham, 2009). It employs model fit statistics such as Comparative Fit Index (CFI), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI) and also Bentler–Bonett Normed Fit Index (NFI) and value of all of them is close to 1.00, demonstrating there is a good fit. Statistics of Additional Model are the value of chi-square to degree of freedom (chi-square/df), that has to be not more than 3 and also root mean square error of approximation (RMSEA) that has to be below 0.8. Particularly, chi-square is not considered as a good fit index here since it is impacted by small sample size (Hair et al., 2009; Byrne, 1998).

4. Findings

4.1 Measurement Model

Research model test contains reliability analysis regarding internal consistency which was calculated by means of Cronbach's alpha. Cronbach's alpha of construct ranged from 0.708 to 0.889 that is more than minimum score of cut-off of 0.7 suggested by Hair et al. (2009). Confirmatory Factor Analysis (CFA) by means of maximum estimation of 387 participants has been done in order to assess underlying structure of the existing variables in the model. All of measures have been accomplished by considering reliability, construct validity and un-dimensionality (Anderson & Gerbing, 1988; Bagozzi & Yi, 1988; Byrne, 1998). Findings demonstrated satisfactory fit to data (chi-square value (df) = 89.743(56); $\chi 2/df = 1.60$; CFI = .985; GFI = .967; AGFI = .946; NFI = .962; RMSEA = .040). All of existing items loaded more than 0.60 on assigned factors and also were remarkably associated with specific constructs ($p < .001$). These findings presented evidence regarding un-dimensionality.

Table 3. Discriminant and convergent validity

Observed Variables	***AVE***	***CR***	***1***	***2***	***3***	***4***	***5***	***6***	***7***
1 (Training)	.652	.917	**.652**	.123	.133	.061	.160	.014	.313
2 (Staffing)	.710	.924	.350	**.710**	.062	.121	.067	.011	.193
3 (Performance Appraisal)	.643	.915	.365	.250	**.643**	.103	.078	.023	.423
4 (Reward and compensation)	.691	.930	.248	.349	.322	**.691**	.082	.012	.197
5 (Team work and Participation)	.598	.880	.401	.260	.280	.288	**.598**	.012	.271
6 (Justice)	.604	.914	.122	.105	.154	.111	.114	**.604**	.230
7 (Knowledge Sharing)	.769	.952	.560	.440	.651	.444	.521	.480	**.769**

All estimated correlations (r) are shown in the left side of the bold values diameter while the rightside valuesshow squared of correlations (r^2).

Through assessing discriminate validity and convergent validity, construct validity has been examined (Fornell & Larcker, 1981; Ping, 2004). According to Table 3, all of loaded indicators on proposed constructs are significant at $p < 001$. Average Variance Extracted (AVE) regarding measure ranged from .598 to .769, was more than the suggested value of 0.50 which confirms convergent validity. Besides, composite reliability (CR) should be more than 0.6 (Bagozzi & Yi, 1988; Fornell & Larcker, 1981). In order to make sure about discriminate validity, squared correlation coefficients among each pair of available constructs should be less than AVE for each single construct (Fornell & Larcker, 1981; Ping, 2004). Value of AVE for constructs was more than squared correlation among constructs, showing that discriminate validity was obtained. In addition, an acceptable statistically model has been identified and measurement model overall explained relationships between five constructs and thirteen items which measure latent constructs.

4.2 Structural Equation Model

In order to fit this model, some of items have been eliminated (They are marked with * in Table 1). Findings demonstrated a satisfactory fit for data (chi-square value (df) = 56.31 (46); $\chi 2/df = 1.224$; CFI = .923; GFI = .977; AGFI = .965; NFI = .989; RMSEA = 0.79). Thus, in next step, relationships between variables were calculated by SEM (Table 4).

Table 4. Impact of HRM practices on knowledge sharing

Hypothesis	**Path**	**Path Coefficient**	**Std. Error**	**Critical Ration**	**P-value**	**Remarks**
H1	Training → Knowledge Sharing	.372	.087	4.23	0.00	Supported
H2	Staffing → Knowledge Sharing	.351	.118	2.97	.011	Supported
H3	Reward → Knowledge Sharing	.483	.089	5.41	0.00	Supported
H4	Appraisal → Knowledge Sharing	.211	.077	2.72	.009	Supported
H5	Participation → Knowledge Sharing	.166	.054	3.05	.007	Supported

According to Table 4, all of HRM practices have significant and positive impact on knowledge sharing, maximum impact is related to reward and compensation (β=.483, p=0.00) and on the other side minimum impact is for participation (β=.166, p=0.007). The results of this study support H1, H2, H3, H4 and H5.

4.3 Moderating Role

One multiple group analysis has been done in order to examine moderating impact of perceived justice (PJ), regarding relationships between the constructs (Byrne, 2009). This multiple group analysis is considered as a hierarchical method through which two specific sub groups are being compared to each other. Participants have been separated as two groups (a low-PJ (N=201) and a high-PJ group (N=186)) were achieved according to median split of moderating factor (m=3) (Chandrashekaran & Grewal, 2003). In order to examine differential impacts of perceived justice among high-PJ and low-PJ group, this research developed invariance test by means of chi-square value comparison as well as degree of freedom regarding overall model and also constrained model (Anderson & Gerbing, 1988). Therefore, the moderating role of perceived justice in the relationship between HRM practices and knowledge sharing was defined (Table 5). The results support the moderating role of perceived justice for each practice.

Table 5. Test of moderating role of perceived justice

Paths	Standardize estimate		Results
	High-PJ (n=186)	Low-PJ (n=201)	
Training → Knowledge Sharing	.392 (5.22)**	.286 (3.75)**	Accepted
Staffing → Knowledge Sharing	.331 (2.65)**	.346 (3.01)**	Accepted
Reward → Knowledge Sharing	.501 (5.55)**	.402 (4.81)**	Accepted
Appraisal → Knowledge Sharing	.201 (2.32)*	.223 (2.91)*	Accepted
Participation → Knowledge Sharing	.178 (3.33)**	.154 (2.94)*	Accepted

*: p< .05; **: P< .001

According to achieved results in Table 5, this study supports H6a, H6b, H6c, H6d, and H6e.

5. Discussion and Conclusion

Achieved results demonstrated that all of HRM practices can impact knowledge sharing. According to Table 4, training has positive and significant impact on knowledge sharing (β=.372, p=0.00). Results are consistent with previously conducted researches by Low and Mohammed (2005), Fong et al. (2011), Asgharian et al. (2013) and Khanmohammadi (2014). In addition, according to findings in Table 5, perceived justice can moderate relationship between training and knowledge sharing. It means that impact of training on knowledge sharing is influenced by perceived justice of lecturers. Moreover, it was realized that lecturers in high-PJ group will improve their knowledge sharing through training.

Impact of staffing on knowledge sharing (β=.351, p=0.011) is also significant and positive. So it can be concluded that in order to improve knowledge sharing among lecturers, universities can consider some factors such as tendency to donate and collect knowledge for their selection system. One of the staffing items is recruiting different races and genders which were retained in SEM analysis. These findings are consistent with the research findings by Fong et al. (2011).

This shows that employing different races and genders will contribute to increase in knowledge sharing among lecturers. This is consistent with results of research conducted by Ojha (2005), Sawng et al, (2006) and Wang and Noe (2010). Interaction among RBV and equity theory resulted in new outcomes in case of relationship between knowledge sharing and staffing. On the other hand, perceived justice (before and after recruitment) can impact relationship between staffing and knowledge sharing. According to achieved results in Table 5, low-PJ group shows more interest to share knowledge.

Reward and compensation have significant and positive impact on knowledge sharing (β=.483, p=0.00) which is opposite to results from research conducted by Fong et al. (2011). On the other hand, achieved results are consistent with research conducted by Wang and Noe (2010), Asgharian et al. (2012), Wei et al. (2012), and Khanmohammadi (2014). Therefore, Malaysian universities can use reward system in order to motivate lecturers so they will share their knowledge with each other. Moreover, relationship between reward system and knowledge sharing can be influenced by perceived justice.

Achieved results from SEM demonstrated that performance appraisal can impact knowledge sharing among lecturers (β=.211, p=0.009). All of findings are consistent with conducted researches by Fong et al, (2011) and

Wang and Noe (2010). Thus, universities through considering knowledge sharing factor in evaluating lecturers' performance can increase knowledge sharing level among lecturers. Additionally, results revealed that perceived justice moderates relationship between performance appraisal and knowledge sharing.

Final HRM practice is participation and results demonstrated that it can impact knowledge sharing (β=.166, p=0.007). Hence, through lecturers' participation in decision making processes and also shifting them into teamwork, knowledge sharing will be improved. Findings are consistent with conducted researches by Goh (2002), Zarraga and Bonache (2003), and Fong et al. (2011). Besides, moderating role of perceived justice was supported in the relationship between participation and knowledge sharing.

According to the supporting moderating role of perceived justice on relationship between all of HRM practices and knowledge sharing, universities should attempt to improve their level of justice. Justice has different dimensions such as distributive, procedural, procedural, interactional and informational. Therefore, universities need to improve all of these 4 dimensions among lecturers. Achieved results demonstrate role of equity theory in using intellectual capital more properly. On the other hand lecturers as talents in the university context need to implement effective HRM practices in order to increase knowledge sharing. It can be impacted by perceived justice of lecturers.

Future studies can test framework of current research in other contexts such as hospitals and by considering doctors as population of study. Moreover, other variables such as innovation and non-financial performance can be added to this framework. Such variables can be considered as dependent variables to knowledge sharing.

To extent the theoretical outcomes of this research, future study can explore the main factors which are able to affect the relationship between HRM practices and knowledge sharing. It will expand the moderating factors (external and internal) based on their importance in the scope of study.

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