

Impacts of International HRM Practice upon Water Resource and Hydropower Company Performance Analyzed with Talent Management Practice and Organizational Learning Capabilities.

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Abstract

This paper determines impacts of International HRM practice (IHRMP) on water resource and hydropower company performance (WHCP), using Talent Management Practice (TMP) and Organizational Learning Capabilities (OLC) as the frameworks. TMP mediators and OLC moderators were also examined to find any effects on either IHRMP or WHCP, or both. Data collection consisted of 400 samples and a focus group of 25 companies responsible for water resource and hydropower in Lao PDR. The questionnaire related to the dimensions of IHRMP, TMP, OLC and WHCP was developed in forms of both paper and Google form. The respondents' feedback was tested the validity and reliability, where the factor, correlation, and regression were used in analysis in the SPSS program. The results showed that the relationship between IHRMP provided a positive significant relationship to TMP and WHCP, respectively. TMP can mediate the relationship between IHRMP and WHCP, confirming by the coefficient of indirect effect higher than that of direct effect. OLC moderators did not influence the relationship variation between TMP and WHCP as the interaction between TMP and OLC provided a significance level of more than 0.05. HRM/TM practice would be able to transform HR into human capital as well as talent people and the adaptation of IHRMP, and TMP would help increase the effectiveness of water resource and hydropower company for water management and electricity generation for consumers during both wet and dry season. It was further recommended that another analysis like structural equation modelling (SEM) simulated on AMOS and the calculations of validity, reliability, factor, correlation, and regression using relevant equations should be compared with SPSS simulation for effectively and efficiently proving the research findings of this study.

Keyword: International HRM Practice, TM Practice Mediating Effect, OLC Moderating Effect

Introduction

As the Governments of Laos and China have attended the Belt and Road forum, they concurred to build the Belt and Road Initiative as a chance to strengthen cross border relations and cooperation (Thiravong, 2016), leading to the energy sector cooperation for planning the power system to secure the power grid and develop a power source in Laos as a hub role in power export to neighbouring countries. Power resource from richness

in water resource caused many hydropower developments with a potential of 28 GW. Domestic hydropower consumption is low, compared with the total capacity of hydropower plants countrywide, so the Government signed the MOU and power purchasing agreement with ASEAN countries for exporting the surplus power to Thailand, Vietnam, Cambodia and Myanmar.

However, with great potential, rapid development and growth of water resource and hydropower sectors, major issues can occur and influence the human resource management (HRM) practice in driving the energy business. The HRM practice worldwide links with talent management (TM) practice that considers the talent workforce with competency and skill to provide high potential and performance for organizational development. HRM/TM practice's aim is to recruit and to select talents from inside or outside companies for fulfilling the HRM/TM system like attraction, deployment, development and retention (Michaels, 2001; Poorhosseinzadeh, 2013). The TM practice was used as a variable to mediate the relationship between HRM practice and firm performance, and mixed with moderating variables as combined in previous research framework (Glaister, 2017). Although, the impact of HRM practice on hydropower company performance was studied (Thanh, 2014) and TM practice was discussed in many studies (Schweyer, 2010; Schuler, 2011; Bayyoud, 2015; Paidipati et al., 2017; Mwanzi, 2017; Kumar, 2017), the effect of TM practice on water resource and hydropower company performance are lacking in previous studies. Also, the organizational learning capabilities (OLC) is also one of key factors to be employed with HRM practice, where OLC (including managerial commitment, systems perspective, openness & experimentation, and knowledge transfer & integration) can be directly linked with and affected by HRM practice (including selection, development, appraisals and rewards) (López-Cabrales, 2011).

From above evidence and the reasons why many variables are necessary to combine in the model of HRM system by using the TM practice and OLC as mediator and moderator, respectively. It is a fair condition to construct a model of mentioned variables to combine with HRM practice for investigating their effectiveness on the company performance upon water resource and hydropower sectors in Lao PDR. Therefore, this study aimed to determine impacts of International HRM practice (IHRMP) on water resource and hydropower company performance (WHCP) as well as investigating the TM practice mediation and OLC moderation effect on either IHRMP or WHCP, or both.

Purpose

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Methodology

Quantitative research method (Bacon-Shon, 2015) was employed for field survey in data collection. The selected sample size ($n=400$) was a maximum value calculated by $n = N/(1+N.e^2)$, where N and e are a number

of population and relative error ($e=5\%$), respectively (Adam, 2020). The questionnaire related to the dimensions of IHRMP, TMP, OLC, and WHCP specified in the framework above was developed with four questions per dimension or sixteen questions/items per variable. The score rating of each question was measured from 1 to 5 (Southiseng, 2013). Both paper and Google-form questionnaire as data collection tools was distributed to 25 companies responsible for water resource and hydropower in Lao PDR. The feedback of the questionnaires was collected to analyze the descriptive statistics, validity, reliability, factor, correlation, and regression via the SPSS simulation tool. The descriptive statistics was relevant to the mean value and standard deviation of each dimension/variable, indicating the degree of agreement and application of IHRMP, TMP, OLC and WHCP. The validity, reliability, and factor analysis simulated on SPSS software (Arkkelin, 2014) were analyzed to reduce the dimension of each variable or delete some unconforming respondents. The validity of each variable was tested by correlation analysis in order to check whether the Pearson correlation coefficient achieve the statistical significance level ($Sig.<0.05$). The reliability test was conducted by verifying whether the Cronbach's alpha is greater than 0.7 ($\alpha>0.7$). The Kaiser-Meyer-Olkin (KMO) value must be greater than 0.7 and Bartlett's test must achieve $Sig.<0.05$ for indicating a suitable data as mentioned. Factor analysis was then conducted to remove some unconforming item of each variable and the remaining items of IHRMP, TMP, OLC and WHCP were averaged as the independent variable, mediating variable, moderating variable and dependent variable for correlation and regression analyses.

The relationships between IHRMP& TMP, TMP & WHCP and IHRMP & WHCP were investigated by correlation analysis and proved by r at $Sig.<0.05$. TMP mediation and OLC moderation effects between IHRMP & TMP and TMP & WHCP, respectively were investigated by regression analysis. For investigating mediation effect, the framework as Fig. 1 was converted into Fig. 2 to compare the coefficients between the indirect effect (IHRMP \rightarrow TMP \rightarrow WHCP) and direct effect (IHRMP \rightarrow WHCP) defined as a coefficient ($a \times b$) and coefficient (c), respectively. The coefficient of indirect effect must be greater than that of direct effect in order to confirm that mediator can impact the variation in relation between independent and dependent variables. However, the significance level ($Sig.$) of indirect effect must be less than that of direct effect in order to confirm such a mediator as well. For investigating moderation effect, the OLC moderator and the interaction between TMP and OLC (TMP.OLC) were considered as independent variables that impacted WHCP and the framework mentioned was thus converted into Fig. 3. The $Sig.$ of the interaction term must be less than 0.05 in order to confirm that the moderator can impact the variation in the relationship between as mentioned (Cox, 1984; Dodge, 2003).

Result

Survey data from 25 companies was collected and described the statistics of each dimension/variable summarized as a mean value of 3.1181-3.1644, 3.0844-3.1375, 3.0500-3.0719 and 3.0838 - 3.2125 for IHRMP, TMP, OLC and WHCP, respectively. These mean values showed that the dimensions of mentioned variable were

fairly applied and slightly agreed. The standard deviation (SD) value of each dimension/variable was lower than 0.62077, where the minimum value of 0.43066 was found at WHCP. Sixteen items of each variable have tested the validity and reliability via SPSS simulation. As a result, IHRMP, TMP, OLC and WHCP provided r of 0.290-0.630 0.378-0.793, 0.179-0.719, 0.323-0.657 and 0.282-0.652, respectively, and passed the validity test due to achievement of Sig. < 0.05. The α was 0.80, 0.91, 0.81 and 0.77 for IHRMP, TMP, OLC and WHCP, respectively and passed the reliability test due to achievement of $\alpha > 0.7$.

The factor analysis result found that sixteen items for IHRMP, TMP, and OLC were suitable and acceptable because each item was placed in only 1 component, while item 11 (Employee Perceived 3) of WHCP was deleted due to placement in 2 components. The factor analysis results in detail were described with factor loading below:

IHRMP Component 1: Item 3 (HR Planning 3), Item 6 (HRM Policy 2), Item 4 (HR Planning 4), Item 5 (HRM Policy 1), Item 7 (HR Policy 3), Item 8 (HRM Policy 4), Item 2 (HR Planning 2), and Item 1 (HR Planning 1) with factor loading of 0.781, 0.774, 0.726, 0.711, 0.69, 0.629, 0.608 and 0.54, respectively.

IHRMP Component 2: Item 10 (HRM Strategy 2), Item 11 (HRM Strategy 3), Item 9 (HRM Strategy 1) and Item 12 (HRM Strategy 4) with a factor loading of 0.827, 0.805, 0.765 and 0.538, respectively.

IHRMP Component 3: Item 14 (Business Strategy 2), Item 15 (Business Strategy 3), Item 13 (Business Strategy 1) and Item 16 (Business Strategy 4) with a factor loading of 0.795, 0.711, 0.71 and 0.491, respectively.

TMP Component 1: Item 5 (Talent Development 1), Item 8 (Talent Development 4), Item 15 (Talent Retention 3), Item 12 (Talent Deployment 4), Item 16 (Talent Retention 4), Item 10 (Talent Deployment 2), Item 7 (Talent Development 3), Item 11 (Talent Deployment 3) and Item 14 (Talent Retention 2) with factor loading of 0.798, 0.784, 0.783, 0.779, 0.764, 0.741, 0.704, 0.676 and 0.668, respectively.

TMP Component 2: Item 6 (Talent Development 2), Item 9 (Talent Deployment 1) and Item 13 (Talent Retention 1) with factor loading of 0.906, 0.884 and 0.859, respectively.

TMP Component 3: Item 3 (Talent Acquisition 3), Item 2 (Talent Acquisition 2), Item 4 (Talent Acquisition 4) and Item 1 (Talent Acquisition 1) with a factor loading of 0.768, 0.754, 0.732 and 0.607, respectively.

OLC Component 1: Item 8 (Participative decision making 4), Item 7 (Participative decision making 3), Item 9 (Managerial commitment 1), Item 6 (Participative decision making 2), Item 10 (Managerial commitment 2), Item 12 (Managerial commitment 4), Item 11 (Managerial commitment 3) and Item 5 (Participative decision making 1) with factor loading of 0.759, 0.724, 0.688, 0.671, 0.657, 0.620, 0.612 and 0.590, respectively.

OLC Component 2: Item 2 (Knowledge sharing and transfer 2), Item 4 (Knowledge sharing and transfer 4), Item 3 (Knowledge sharing and transfer 3), Item 1 (Knowledge sharing and transfer 1) with a factor loading of 0.778 0.753 0.745 and 0.733, respectively

OLC Component 3: Item 15 (Risk-taking 3), Item 16 (Risk-taking 4), Item 14 (Risk-taking 2) and Item 13 (Risk-taking 1) with a factor loading of 0.815, 0.695 0.633 and 0.580, respectively.

WHCP Component 1: Item 7 (Profit Margin 3), Item 6 (Profit Margin 2), Item 9 (Employee Perceived 1), Item 8 (Profit Margin 4), Item 10 (Employee Perceived 2), Item 5 (Profit Margin 1) with a factor loading of 0.776, 0.750, 0.741, 0.725, 0.637, 0.554 and 0.657, respectively.

WHCP Component 2: Item 2 (Profit Growth 2), Item 1 (Profit Growth 1), Item 3 (Profit Growth 3) and Item 4 (Profit Growth 4) with a factor loading of 0.855, 0.795, 0.772 and 0.604, respectively.

WHCP Component 3: Item 13 (Employee Performance 1), Item 14 (Employee Performance 2), Item 15 (Employee Performance 3), Item 16 (Employee Performance 4) and Item 12 (Employee Perceived 4) with a factor loading of 0.685, 0.681, 0.672 and 0.460, respectively.

The KMO value of each variable was greater than 0.7, and Bartlett's test achieved Sig.< 0.05. Sixteen items for IHRMP, TMP and OLC and fifteen items for WHCP were averaged as input data for correlation and regression analyses. From correlation analysis results, it is found that IHRMP correlated to TMP and WHCP by *r* of 0.765 and 0.600, respectively at Sig. < 0.01. TMP and OLC also correlated to WHCP by *r* of 0.775 and 0.267, respectively, at Sig. < 0.01. The mentioned results gained a positive and significant relationship between IHRMP&WHCP, IHRMP & TMP, TMP &WHCP, and OLC & WHCP, meaning that hypotheses H1 and H2 can be accepted.

Table 1 Effect of IHRMP and TMP coefficients on the dependent variable

Effect of IHRMP coefficient on TMP						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.066	.125		.530	.596
	IHRMP	.976	.040	.779	24.715	.000
Effect of TMP coefficient on WHCP						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	1.428	.062		22.914	.000
	TMP	.558	.020	.821	28.394	.000
Effect of IHRMP/TMP coefficient on WHCP						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
3	(Constant)	1.395	.080		17.369	.000
	IHRMP	.026	.040	.030	.663	.508

	TMP	.543	.031	.798	17.685	.000
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From table 1, The coefficients $a = 0.976$, $b = 0.558$ and $c = 0.026$ were found in model 1, model 2 and model 3, respectively. The mediation effect or indirect effect with $a \times b = 0.976 \times 0.558 = 0.544$ at Sig <0.01 was higher than the direct effect with $c = 0.026$ at Sig. = 0.508, (Sig. > 0.05). The coefficient of 0.543 at Sig. < 0.01 specified in model 3 can be also determined as indirect effect with ($a \times b = 0.544$). Thus, the indirect effect (TMP mediation effect) was more significant than the direct effect and hypothesis H3 was acceptable. When compared the effect of TMP and OLC coefficients on WHCP between Model 1: “Without TMP.OLC” and Model 2: “With TMP.OLC”. In Model 1, TMP provided Sig. <0.01 (Sig. = 0.00), while OLC provided Sig. <0.05 (Sig. = 0.034). When considering the TMP.OLC, the moderation effect caused the variation in Sig. of OLC (Sig. = 0.026 < 0.034). However, the moderation effect was insufficient for influencing the relationship between TMP and WHCP due to Sig. > 0.05 (Sig. = 0.07). Therefore, hypothesis H4 was not acceptable for this case study.

Discussion

The results of this paper conformed with previous studies and hypotheses which offered positive significant relationships between HRM practice & firm performance (Than, 2014; Khalid, 2014), HRM practice& TM practice (Glaister, 2017), and TM practice & firm performance (Mwanzi, 2017). The mediation effect of TM practice in this study can impact significantly and positively the variation in relationship between HRM practice and firm performance and conformed with the result specified in Glaister (2017), Karim&Karam (2017), and Al-Hussaini (2019). Although, the OLC also provided a positive relationship with HRM practice and firm performance which is in line with the studies of López-Cabrales (2011) and Hailekiros (2016), respectively, but its moderating role cannot influence the variation in relationship between HRM/TM practice and firm performance which conflicted with its moderation effect of Lukito (2016).

Conclusion

The impacts of IHRMP on WHCP were investigated with the TMP mediators and OLC moderators to see the relationship between IHRMP and WHCP. The questionnaire relevant to question/item of IHRMP, TMP, OLC and WHCP (sixteen items per variable) was distributed to water resource and hydropower companies in Lao PDR for data collection. The respondents’ feedback was summarized for testing and analyzing the validity, reliability, factor, correlation and regression by using the SPSS software. The simulation results found that the items and dimensions of each variable were provided with an optimal Pearson correlation coefficient and Cronbach’s alpha for passing the validity and reliability tests, respectively, and then taken into a factor analysis. All items can pass the factor analysis. Sixteen items for IHRMP, TMP, and OLC, and fifteen items for WHCP were averaged as IHRM independent variable, TMP mediating variable, OLC moderating variable, and WHCP dependent variable for correlation/regression analysis. From correlation analysis results, it is found that IHRMP & WHCP, IHRMP & TMP, TMP & WHCP, and OLC & WHCP showed a significant positive relationship among them, accepting the hypotheses. The regression analysis result found that the TMP mediation effect can influence the

relationship between IHRMP and WHCP, which can be proved by the coefficient of mediation or indirect effect ($a \times b = 0.543$) higher than that of the direct effect ($c = 0.026$). However, OLC cannot moderate the relationship between TMP and WHCP due to Sig's interaction between TMP and OLC. > 0.05 (Sig. = 0.07).

Discussion

Impacts of International HRM Practice upon Water Resource and Hydropower Company Performance Analyzed with Talent Management Practice and Organizational Learning Capabilities. The simulation results found that the items and dimensions of each variable were provided with an optimal Pearson correlation coefficient and Cronbach's alpha for passing the validity and reliability tests, respectively, and then taken into a factor analysis. All items can pass the factor analysis. Sixteen items for IHRMP, TMP, and OLC, and fifteen items for WHCP were averaged as IHRM independent variable, TMP mediating variable, OLC moderating variable, and WHCP dependent variable for correlation/regression analysis. From correlation analysis results, it is found that IHRMP & WHCP, IHRMP & TMP, TMP & WHCP, and OLC & WHCP showed a significant positive relationship among them, accepting the hypotheses. The regression analysis result found that the TMP mediation effect can influence the relationship between IHRMP and WHCP, which can be proved by the coefficient of mediation or indirect effect ($a \times b = 0.543$) higher than that of the direct effect ($c = 0.026$). However, OLC cannot moderate the relationship between TMP and WHCP due to Sig's interaction between TMP and OLC. > 0.05 (Sig. = 0.07).

Suggestion

1. This research findings recommended that the optimization of HRM practice with key factor like TM practice can gain more benefits than single HRM practice. Application of TM practice would develop the HR system more efficiently and effectively, and it can transform HR into human capital as well as talent people. The adaptation of IHRMP and TMP would help increase the effectiveness of water resource and hydropower sectors and help the organization gain multiple effective and efficient use of water management to reduce floods and droughts that harm the environment. Also, it helps generate stably and sufficiently the electricity for consumers during both wet and dry season. However, many case studies of HRM/TM practice and OLC should be considered for comparing and proving that mentioned practice does properly influence the organization growth.

2. The results of this paper suggested that further research should employ another analysis method like structural equation modeling (SEM) on AMOS software to compare with correlation/regression analysis programmed on SPSS software. Moreover, the calculation results for validity, reliability, factor, correlation and regression by using any related equations should be further taken into comparison for proving and confirming more effectively and efficiently the simulation results.

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