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The Influence of Talent Management Practice on Water Resource and Hydropower Company Performance by using the Moderator Effect of Cultural Difference

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Abstract

International relations and cooperation between Laos and China have been strengthened under the Belt and Road Initiative, especially the energy sector relevant to the development of water resources and hydropower and the improvement of power system stability. As the development and growth of water resource and hydropower sectors in Laos, these sectors' human resource and HR department have to get ready for coping with changes by improving the HR system and considering the talent management practice (TMP) for increasing energy business performance. The purpose of this study was to determine the TMP influence on water resource and hydropower company performance (WHCP) as well as the cultural

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difference (CD) that moderated the linkage between TMP and WHCP. A quantitative research method as a questionnaire was developed for data collection at hydropower companies. Investigation of the relationship between TMP independent, CD moderator and WHCP dependent variables were simulated on SPSS software via Correlation and regression analyses (Wording explain: Correlation and Regression are the function in SPSS). The simulation results via Correlation analysis found that three variables were positively interrelated at a significant level (sig.<0.05) which achieved the acceptable hypothesis. The relationship between variables was also found from regression analysis results, which TMP, CD, and the interaction between TMP and CD (TMP.CD) influenced WHCP by 67.4%, 37.7% and 53.7%, respectively. Eventually, the CD moderator variable impacted the relationship between TMP and WHCP as confirmed by TMP.CD that provided its coefficient at Sig. < 0.05 (Sig. = 0.044). Furthermore, it is recommended that the moderation and mediation effects be combined and employed in the research framework of HR/talent management for developing the research in the future.

Keyword: Talent Management Practice, Cultural Difference, Moderator Effect, Water Resource and Hydropower Company Performance.

Introduction

The Belt and Road Initiative proposed by the Government of China has strengthened the international relation and cooperation between two countries (Thiravong et al., 2016), especially the energy sector cooperation between Laos and China in relation to the power development plan for building up the power resources and improving the power system stability of Laos to play a significant role in power export to neighbouring. Mekong River and its branches distributed countrywide are important water resources that have influenced Lao People for their better life in many aspects such as irrigation, fishery, transportation, water consumption, hydropower, etc. (Matthews, 2012), specifically the hydropower supplied to domestic consumers as well as an export with an estimated power potential of 28 GW. As the high potential of water resources and hydropower sectors have been continuously developed, the human resource (HR) in Laos and the HR department of concerned parties have to cope with rapid development and improve the human resource management (HRM) practice for increasing the performance of energy business from water resources and hydropower sectors.

The HRM practice coordinated and related with talent management (TM) practice that applied the high potential HR, socalled talent people, for being the specialist with expertise, high competency performance in driving the organization. The main goal of the relationship between HRM and TM practices was to recruit talent people from both internal and external resources to succeed

the HRM and TM process like attraction, deployment, development, and retention of HR or talent (Michaels, 2001; Poorhosseinzadeh & Subramaniam, 2013). Each type of business has its own culture and uses different HRM/TM or cross-cultural lenses for strongly driving the corporate business (Elaine & Karin, 2017). The cultural difference can be identified as national culture difference, organizational cultural difference, etc., which affects the HRM and HR policies of international organizations or multinational companies (Sarah, 2016). The cultural difference would be considered amoderator variable as the previous study formulated the hypothesis to indicate the relationship between independent, dependent, mediator, andmoderator variables.

There are some relevant studies regarding HRM practices that significantly impact to employees' perceived organizational performance and financial performance of Hydropower Company in Vietnam (Thanh et al., 2014) and the HR development for hydropower sector in the USA to develop the workforce skill by conducting the training and necessary education for filling skillset gaps (Paidipati et al., 2017). However, the talent management (TM) research was not found in the water resource and hydropower sectors. Many private companies and state-owned enterprises in Lao PDR have still applied the general HRM practice.

Research Objectives

The problem and the cause mentioned above lead to why the Talent Managemant practice, here in after referred to as 'TMP',

has to be considered with moderator variables like the cultural difference,hereinafter referred to as 'CD'. Therefore, this study was proposed to determine the influence of TMP on water resource and hydropower company performance, hereinafter referred to as 'WHCP', and investigate the moderator effect of cultural difference as a regulator between talent management practice and company performance.

Literature Review and Hypothesis Development

Talent management with a similar element to HRM was mostly studied and described its influence on firm performance by identifying the talented performers for talent nurturing, cultural diversity, and workplace environment for raising the organization performance. Talent identification was necessary for organization growth because the success of talent nurture and talent management gained from initially identifying the suitable talent people and offering an optimal environment for their working (Mwanzi, 2017). Talent management that played an important role in company performance was discussed and reviewed in several previous studies. These include the necessity of talent management and its value, advantage and performance of talent management, career management, etc. These studies provided helpful impacts to the organization's performance, like profit growth and customer faithfulness (Bayyoud, 2015). Another mention of talent management is talent acquisition, which is concerned with many dimensions like identification, recruitment, attraction,

development, engagement, and retention of a talented workforce. Such dimensions offered a significant role in developing the organization's performance and positively influence domestic and international organization performances (Hongal, 2020). Four key elements of talent management were also reviewed and mentioned in previous research work: talent acquisition, talent development, talent deployment, and talent retention. This system was adopted to investigate the impact on business performance (Kumar, 2017), which will be appropriately adopted in the framework as the following hypothesis.

Hypothesis 1: The Talent Management Practice (TMP), including its dimensions: talent acquisition, talent development, talent deployment, and talent retention, positively influences firm performance.

The cultural difference in previous studies can be specified as National culture, organizational culture, and cross-cultural perspective, which describe their relationship to human resource management (HRM) and influence firm business as specified in (Elaine & Karin, 2017). The culture and its dimensions were adopted as variables to determine their relationship level influenced to HRM. Such culture can provide a significant positive relationship with global HRM, as reported in John (2016). The culture might not directly affect to HR system and firm performance. Still, it indirectly relates to other aspects like employee turnover and operational performance, which were impacted by organizational culture as a moderator for the hypothesis mentioned in a previous study (David, 2012). The cross-culture HRM

between China and Westerners was compared in which both cultures are different in terms of leadership prototypes, organizational culture, contrasting value systems, etc. (Chien, 2016). In Lao PDR, many foreign investors and partnerships have developed hydropower projects such as the hydropower companies from China, Thailand, Vietnam, the USA, France, etc. The culture of these countries is certainly different in terms of working style, employee behaviour, and lifestyle. Thus, the dimensions of cultural difference are defined as Chinese culture, Western culture, ASEAN culture and National culture. Due to the effect of HRM practice on firm performance similar to the process of TMP, the cultural difference as mentioned can be a moderator variable in the middle of TMP and firm performance as following hypothesis formulation.

Hypothesis 2: The cultural difference, including Chinese culture, Western culture, ASEAN culture and National culture, can moderate the relationship between TMP and firm performance.

The term 'firm performance' as mentioned above can be defined as the areas of profit, revenue, sale growth, financial output, employee satisfaction, etc. (Kim & Ployhart, 2014; Snell& Youndt, 1995; Hoque, 1999; Guest et al., 2003; Wright et al., 2005). For this study, the firm performance related to water resource and hydropower company performance (WHCP) which its dimension can be measured as profit growth, profit margin (Glaister, 2017), employees' perceived organizational performance (Thanh et al., 2014) and employee performance (Khalid, 2014). Independent, moderator and dependent

variables, and hypotheses are then combined as the framework of this study.

Research Methodology

The quantitative research method for data collection is related to the statistical population for survey questionnaires with sample size (Bacon-Shon, 2015; Valverde & Ryan, 2006; Snape & Redman, 2010). The sample size was calculated by n = N/(1+N.e2), where N is a number of population and e is a relative error (e = 5%), respectively (Adam, 2020). The maximum value from the calculation is n = 400 samples for distribution to respondents from water resource and hydropower companies. The questionnaire in this study was concerned with dimensions of TMP, CD, and WHCP. Each variable comprises four dimensions. One dimension was composed of 4 questions, which meant each variable consists of 16 items/questions. For example, the TMP has four dimensions: Talent Acquisition, Talent Development, Talent Deployment, and Talent Retention. Each dimension includes four questions in the questionnaire. Thus, for the TMP variable, there are 16 questions. The answer to each question was measured by a score from 1 to 5 (Southiseng, 2013) that indicates the degree to agree with or apply in each dimension of TMP, CD and WHCP.

The validity, reliability, correlation, and regression analyses were simulated by SPSS software (Arkkelin, 2014). The completed questionnaire of 50 samples was distributed to 25 companies

(2 HR managers per company) for validity and reliability tests prior to the 400-sample distribution. The responses from the 50-sample questionnaire were summarized to determine the Pearson correlation coefficient for validity test, and Cronbach's alpha for reliability test simulated via SPSS and the 400 samples were then distributed to 25 companies after the adequacies of validity and reliability. The 400-sample respondents were again conducted to test the validity and reliability and employed the factor analysis for dimension reduction. Later, the analyses of correlation and regression were applied to investigate the relationship between TMP and WHCP, CD and WHCP, and the moderation effect of CD.

Results and Discussion

The response of each item/question was evaluated in terms of a descriptive statistic, as shown in Table. 1, where each dimension /variable was averaged as the mean value of 3.0844-3.1375, 3.1056-3.1619 and 3.0838-3.2125 for TMP, CD and WHCP, respectively. Such mean value indicated that TMP, CD and WHCP were fairly applied and slightly agreed. The Standard Deviation (SD) value of each variable was less than 0.62077, where the minimum value of 0.43066 was found at WHCP. The low standard deviation showed that such value tended to be close to the mean value.

Table 1: Descriptive statistics of TMP, CD and WHCP

Variable/Dimension	Mean	Standard Deviation
TMP	3.1134	.62077
Talent Acquisition	3.1375	.69538
Talent Development	3.1144	.74542
Talent Deployment	3.1175	.73743
Talent Retention	3.0844	.74122
CD	3.1400	.5494
Chinese Culture	3.1344	.73272
Western Culture	3.1619	.77287
ASEAN Culture	3.1581	.73395
National Culture	3.1056	.76495
WHCP	3.1489	.43066
Profit Growth	3.1281	.72784
Profit Margin	3.0838	.79739
Employee Perceived	3.1713	.67958
Employee Performance	3.2125	.60296

Factor analysis used for reducing any inappropriate item of each dimension/variable was conducted. The analysis result found that 16 items or all items of TMP were suitable and acceptable because each item of TMP was placed in only 1 component. In contrast, CD's item 7 (Western Culture 3) was cut off due to placement in 2 components. Item 11 (Employee Perceived 3) of WHCP was also cut off due to more than 1 component for its placement. The factor analysis result with factor loading was detailed as table 2 below::

Table 2: Factor analysis for TMP, CD and WHCP

TMP	Component		
	1	2	3
Item 5: Talent Development 1	.798		
Item 8: Talent Development 4	.784		
Item 15: Talent Retention 3	.783		
Item 12: Talent Deployment 4	.779		
Item 16: Talent Retention 4	.764		
Item 10: Talent Deployment 2	.741		
Item 7: Talent Development 3	.704		
Item 11: Talent Deployment 3	.676		
Item 14: Talent Retention 2	.668		
Item 6: Talent Development 2		.906	
Item 9: Talent Deployment 1		.884	
Item 13: Talent Retention 1		.859	
Item 3: Talent Acquisition 3			.768
Item 2: Talent Acquisition 2			.754
Item 4: Talent Acquisition 4			.732
Item 1: Talent Acquisition 1			.607
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.789	
Bartlett's Test of Sphericity Approx. Chi-Square		5617.874	
df		120	
Sig.		.000	

CD	Component		
	1	2	3
Item 12: ASEAN Culture 4	.842		
Item 16: National Culture 4	.813		
Item 10: ASEAN Culture 2	.812		
Item 8: Western Culture 4	.782		
Item 5: Western Culture 1	.744		
Item 15: National Culture 3	.694		
Item 14: National Culture 2	.529		
Item 11: ASEAN Culture 3	.498		
Item 13: National Culture 1		.895	
Item 9: ASEAN Culture 1		.890	
Item 6: Western Culture 2		.834	
Item 3: Chinese Culture 3			.778
Item 1: Chinese Culture 1			.716
Item 4: Chinese Culture 4			.700
Item 2: Chinese Culture 2			.682
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.783	
Bartlett's Test of Sphericity	Approx. Chi-Square	3024.65	
	df		105
	Sig.		.000

WHCP	Component		
	1	2	3
Item 7: Profit Margin 3	.776		
Item 6: Profit Margin 2	.750		
Item 9: Employee Perceived 1	.741		
Item 8: Profit Margin 4	.725		
Item 10: Employee Perceived 2	.637		
Item 5: Profit Margin 1	.554		
Item 2: Profit Growth 2		.855	
Item 1: Profit Growth 1		.795	
Item 3: Profit Growth 3		.772	
Item 4: Profit Growth 4		.604	
Item 13: Employee Performance 1			.685
Item 14: Employee Performance 2			.681
Item 15: Employee Performance 3			.672
Item 16: Employee Performance 4			.657
Item 12: Employee Perceived 4			.460
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.770	
Bartlett's Test of Sphericity	Approx. Chi-Square	1822.621	
	df		105
	Sig.		.000

Kaiser-Meyer-Olkin (KMO) and Bartlett's Tests were statistically used for measuring how the data is suitable for factor analysis. The value of KMO was greater than 0.7 (0.789, 0.783 and 0.770 for TMP, CD and WHCP, respectively), and Bartlett's test was at Sig < 0.05 (Ayuni & Sari, 2018). The mean value of 16 items for TMP, 15 items for CD and 15 items for WHCP was summarized as an independent variable, a moderator variable, and a dependent variable for applying in correlation/regression analysis. The correlation analysis result showed that TMP influenced CD and WHCP by Pearson correlation coefficient of 0.757 and 0.775, respectively (Sig.<0.01) and CD also influenced WHCP by 0.583 (Sig.<0.01). These results provided a positive and significant relationship between TMP and CD, CD and WHCP, and TMP and WHCP, which meant that hypothesis H1 was acceptable (hypothesis H2 was described in regression analysis).

To analyze the moderation effect, the moderator variable like CD should be considered as an independent variable like TMP and the interaction between TMP and CD (TMP.CD). The statistical significance of the interaction term indicated that the moderation effect can influence the variation in the relationship between independent and dependent variables (Cox, 1984; Dodge, 2003). TMP, CD, TMP.CD and WHCP were employed in the regression analysis process, as resulted in Tables. 3 and 4.

Table 3: Model summary of regression analysis for TMP versus WHCP, CD versus WHCP and TMP.CD versus WHCP

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.821[a]	.674	.673	.24248
a. Predictors: (Constant), TMP				
b. Dependent Variable: WHCP				
Model Summary[d]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.614[c]	.377	.375	.33236
c. Predictors: (Constant), CD				
d. Dependent Variable: WHCP				
Model Summary[f]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
3	.732[e]	.537	.535	.29087
e. Predictors: (Constant), TMP.CD				
f. Dependent Variable: WHCP				

Table 4: The effect of coefficients on each dependent variable

Effect of TMP and CD coefficients on WHCP in absence of interaction TMP.CD						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.479	.073			
	TMP	.587	.031	.861	19.183	.000
	CD	-.043	.035	-.055	-1.235	.218
Effect of TMP and CD coefficient on WHCP in presence of interaction TMP.CD						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	1.026	.235		4.361	.000
	TMP	.750	.086	1.101	8.682	.000
	CD	.113	.084	.145	1.334	.183
	TMP.CD	-.054	.027	-.418	-2.025	.044

Table 3 showed the model summary of regression analysis between the predictor and dependent variable for Model 1: “TMP versus WHCP”, Model 2: “CD versus WHCP” and Model 3: “TMP/CD versus WHCP”. In model 1, the relationship between two variables can be explained by R2=0.674, which mean that TMP influenced 67.4% of the variation in WHCP. Similarly, in model 2 and model 3, which also meant that R2=0.377 or 37.7% of the variation in WHCP was influenced by CD and R2=0.537 or 53.7% of the variation in WHCP

was influenced by TMP.CD. To accept the hypothesis 2 (H2), the coefficients of each variable should be calculated, which are Model 1: "Effect of TMP and CD coefficients on WHCP in the absence of interaction variable" and Model 2: "Effect of TMP and CD coefficients on WHCP in the presence of interaction variable" as shown in Table 4. In the absence of interaction TMP.CD, the significance level of TMP was lower than 0.05 (Sig.=0.000), while that of CD was higher than 0.05 (Sig.=0.218). In the presence of interaction TMP.CD, TMP was not changed, while CD was reduced from 0.218 to 0.183 and interaction TMP.CD showed a significance level of less than 0.05 (Sig.=0.044). The interaction TMP.CD at Sig.<0.05 indicated that the CD moderation effect influenced the variation in the relationship between TMP and WHCP, and the hypothesis H2 was also acceptable.

Conclusion and Recommendation

The relationship between TMP, CD and WHCP were investigated as well as CD effect moderated between TMP and WHCP. Quantitative research for data collection was applied. A 400-sample questionnaire related to dimensions of TMP, CD and WHCP was distributed to companies responsible for the water resource and hydropower sector in Lao PDR. Each variable had 16 items/questions, and all items of the variables passed validity and reliability tests by providing Pearson correlation coefficient and Cronbach's alpha appropriately. Sixteen items of TMP, 15 items of CD and 15 items of WHCP passed the factor analysis process. Using correlation/regression analysis input, they were

averaged as an independent variable, a moderator variable, and a dependent variable, respectively, using correlation/regression analysis input. The correlation analysis result found that the relationshi p between TMP vs WHCP, TMP vs CD and CD vs WHCP provided a significant positive relationship for confirming the acceptable hypothesis. From regression, analysis results found that TMP independent, CD moderator and TMP.CD interaction variables influenced to WHCP dependent variable by 67.4%, 37.7% and 53.7%, respectively. Finally, the CD can moderate the relationship between TMP and WHCP as hypothesized, which was confirmed by the coefficient of TMP.CD interaction variable at Sig.<0.05. To develop the research work in the future, it is recommended that further study should combine both moderation and mediation effects in the research framework for investigating many factors that would vary the relationship between TMP independent variable and WHCP dependent variable and strengthen the effectiveness of further research work. Moreover, the simulation results should be proved by comparing with calculation results by using relevant equations of validity, reliability, factor analysis and Correlation/regression analysis.

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