



The Influence of Individual Absorptive Capacity on Individual Knowledge Acquisition of Host-County National Workers in Foreign MNCs in Malaysia

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ABSTRACT

The presence of MNCs in Malaysia is expected to give benefits to the nation's human capital developments such as through training and knowledge transfer program. The training that affects almost all levels of local employees in MNCs from production operator level to upper-level officers through on-site or off-site training is expected to increase the local employees' competencies through the presence of effective individual knowledge acquisition at the workplace. Prior to effective individual knowledge acquisition, the individual absorptive capacity of HCN workers is something crucial to be examined. Through this, it will portray the capability of individuals to acquire knowledge in MNCs. Acquiring knowledge in MNCs is one of the important elements for further skill enrichment process that becomes promising factor for HCN workers to increase their skills to a higher level. This behavior is also identified as a turning point for local workers to improve their skills until they become expert or specialist in the related area. The existence of MNCs in Malaysia is assumed to be the best medium for knowledge acquisition activities among locals who serve to that organization. At overall, the study investigates the relationship between two main variables, which is referring to individual absorptive capacity and individual knowledge acquisition.

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1. INTRODUCTION

The aim to be high-income nation requires Malaysia to embark a serious transformation in human capital development. The transformation of human capital development that provides enough talent to serve to the nation

requires a comprehensive plan in developing and retaining the local competencies in various disciplines. Until now, total skilled-labor in Malaysia is still inadequate to cater the need of local and international firms.

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This is supported by the statement made by Economic Planning Unit (2010) in Prime Minister Department, stating that Malaysia just able to produced 28 percent of total domestic labor as local high-skilled labor that ready to serve to the nation. From that situation, there is a need for an immediate action to upgrade and polish the skill of the existing labor through private sector participation in the training and development program since the government aims to get the portion of skilled-labor increased for at least 50% of total workforce by 2020 (The Economic Planning Unit, 2010).

In this context, in-house training and development in private sectors especially from MNCs is perceived to have significant contribution in assisting the acceleration of human capital development in Malaysia. The MNCs are identified as important channel to assist the development of human capital intensity to the nation due to the capability of MNCs to provide training on the state-of-the-art techniques to local workforces. Local workforces are normally sent for training by MNCs with the intention to increase their skills and competencies that afterwards will contribute back to the organizations. Once local workforces receive enough training provided by MNCs in certain area, they can be more competent to perform specific tasks. However, the capability of the local workers to absorb knowledge, in addition to their knowledge acquisition activities during the internal knowledge transfer program are another issue that gain much attention among scholars to look on and also have not yet comprehensively examined.

2. LITERATURE REVIEW

The central idea of absorptive capacity originally is derived from Cohen and Levinthal (1990) who formulate the extension of their initial idea in macroeconomic, explaining the ability of an economy to absorb and utilize the external information of absorptive capacity. They have stated that organization's absorptive capacity is always relying on individual absorptive capacity. In brief, the individual absorptive capacity can give significant impact to the firm's learning (Tang, Mu, & MacLachlan, 2010) especially when that particular firm involves in knowledge transfer activities. So that, it is important to extend the concept of absorptive capacity to the individual level (Tang et al., 2010) especially in cognitive domain because it can reflects the organizational competitive advantage and performance.

With regard to the concept of individual absorptive capacity, Hamel (1991) argued that in an organization, the individual capacity to absorb knowledge is not equally distributed. Everybody has different capability to absorb knowledge because individual capabilities rely on prior related knowledge such as prior educational background and exposure to that particular field, and the motivation of the individual workers. In some situations, the compulsory skills to observe, interpret, apply, and improve the knowledge are only belong to certain employees, while others might not possess that skills (Hamel, 1991). When this situation occurs, the effectiveness of knowledge transfer activities in either inter or intra-firm knowledge transfer will be lower in view of the fact that individual employees in a firm play a vital role in overall knowledge transfer process (Tang et al., 2010). This statement is supported by Kwok and Gao (2006) stating that individuals who possess better absorptive capacity will be more

competent in learning, assimilating, and utilizing knowledge.

Conceptually, the individual absorptive capacity is the same as the organizational absorptive capacity which refers to the ability of oneself to identify, assimilate, and apply knowledge that can bring further benefits to the organization and it can be commercialized for the commercial end (Cohen & Levinthal, 1990). The development of individual absorptive capacity will influence the development organizational absorptive capacity cumulatively since the individual workers in organization act as 'gate keeper' for the external knowledge inflow to the organization (Cohen & Levinthal, 1990).

At individual level, the interrelationship between the individual absorptive capacity and individual knowledge acquisition is perceived to have strong inter-relationship between both constructs (Murray & Chao, 2005). In brief, individual knowledge acquisition is known as the process of acquiring knowledge from domain expert or any authenticated source of knowledge (Mykytyn et al., 1994). In general, the individual knowledge acquisition is known as the process by which the knowledge is obtained (Huber, 1991). Individual knowledge acquisition also refers to the activities by which the employees involve in recognizing and acquiring tacit and explicit knowledge (Zahra & George, 2002). Prior to knowledge acquisition activities, the internal capabilities such as prior related skills influence the effectiveness of the workers' knowledge acquisition activities (Politis, 2002). As a conclusion, the individual absorptive capacity is expected to influence the individual knowledge acquisition of the workers. So that, three hypotheses are developed to be tested using an appropriate statistical analysis.

H1: Individual absorptive capacity will significantly influence individual knowledge acquisition.

H1a: The ability to identify knowledge will significantly influence individual knowledge acquisition.

H1b: The ability to assimilate knowledge will significantly influence individual knowledge acquisition.

H1c: The ability to apply knowledge will significantly influence individual knowledge acquisition.

3. METHODOLOGY

To test the hypotheses, a total of 1245 questionnaires were distributed using mail survey and drop-and-collect approach. The reason for applying various techniques in data collection procedure is due to the ability of this combination technique to gain higher response rate (Parker, 1992; Schaefer & Dillman, 1998). The respondents of the study are local workers (MNCs' host-country nationals) who serve with foreign MNCs in Malaysia in electrical and electronic (E&E) sector. For the implementation of the data collection process, a total of five questionnaires were sent to human resource manager to be distributed to the respondents in the selected organization.

The questionnaire's content was largely based on the structure of the hypotheses formulated above. The questionnaire first requested socio-demographic information on the participants as well as other information to extract additional data for the subsequent segmentation of the participants. All items were

recorded on a one to five-point rating scale with higher scores denoting higher levels of absorptive capacity. For individual knowledge acquisition, it denotes that the extent to which the individual workers performed the behavior of acquiring knowledge at their workplace.

A total of 345 persons participated in the survey. Since only fully completed questionnaires were taken into account for further analysis, the final dataset comprised of 305 observations were finalized. Contingency tests in respect of the non-response bias (Morton-Williams, 1993) did not indicate any significant relationships. Consequently, the researcher did not regard the omitted questionnaires as a debilitating factor.

4. RESULTS AND DISCUSSION

PLS Path Model Estimation and Results Assessment

To estimate structural equation models, the researcher can choose to have either covariance-based methods (Bollen, 1989) or the variance-based PLS approach (Henseler et al., 2009). Base on the objective of the study, that to seek the predictive relevance from the exogenous variables on the endogenous variable, the researcher chose to apply the PLS approach. This was due to the model estimation of its formal premises embody a greater range of flexible applications. In addition, the PLS-SEM is more appropriate for analyzing the predictive model rather than theory testing model (Hair et al., 2011). Moreover, the objective of the analysis was to determine the impact of latent variables that can be measured by reflective measurement models. The PLS approach emerged as more suitable in this regard. Figure 1 below illustrates the network path between variables.

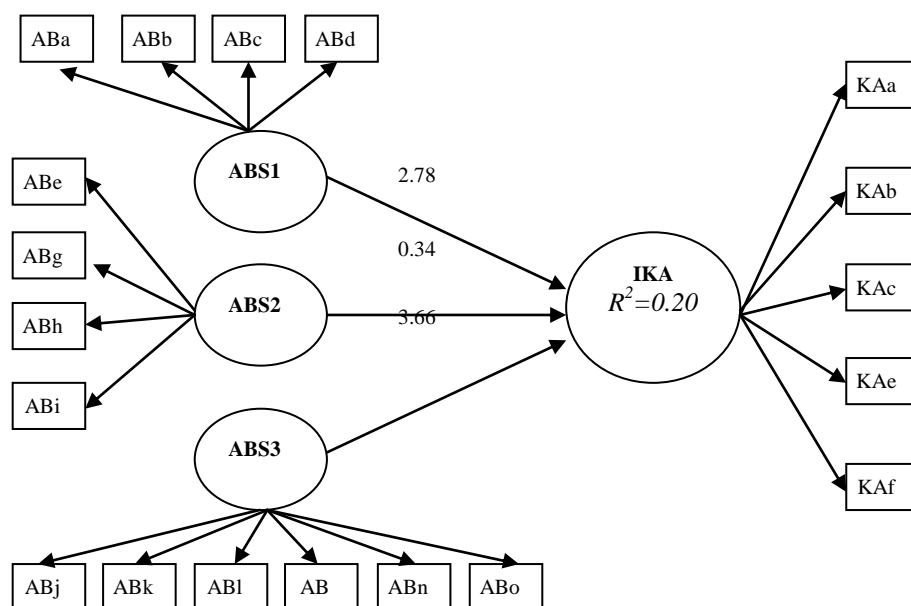


Figure 1

The Network Path Model

To analyze the model, the statistical software application SmartPLS 2.0 was applied. Figure 1 above illustrates the path model, T value for each relationship, and R^2 for the main effect model. Within the scope of structural equation modeling, the inner and outer model assessment require the researcher to assess the reliability, validity, size effect, and goodness of fit of the model. In details, the PLS path model evaluation steps are outer model (measurement model) evaluation with regard to the reflective constructs' reliability and validity while inner model (structural model) evaluation in respect of variance accounted for, path estimates and the predictive relevance of the inner model's explanatory variables for the endogenous latent variable.

Assessment of the Reflective Measurement Model

All the requirements with regard to the reflective measurement model for the exogenous and endogenous latent variable have been clearly met. All factor loadings lie well above 0.60. The average variance extracted (AVE) for all constructs is satisfactory with value above 0.50. Internal consistency, both composite reliability and Cronbachs' Alpha are all above 0.70 which indicates good internal consistency of the variables. All communalities value exceeds 0.50 which implies good indicators' reliability. Table 1 below summarizes the vital statistics of the study.

Table 1
The vital statistics of the outer model

Construct	AVE	Composite Reliability	R ²	Cronbachs' Alpha	Communality
ABS1	0.54	0.82	0.20	0.72	0.54
ABS2	0.61	0.86		0.79	0.61
ABS3	0.58	0.89		0.85	0.58
KA	0.53	0.85		0.78	0.53

Assessment of the Structural Model

The central criterion for the assessment of the structural model is the coefficient of determination R². With a value of 0.20 the R² of the endogenous latent variable ‘Individual Knowledge Acquisition’ lies at a satisfactory level. The Stone-Geisser criterion Q² is established using the blindfolding procedure to compute cross-validated redundancy (Henseler et al., 2009). In the analysis, all Q² values range above the threshold value of zero, thus indicating the overall model’s predictive relevance. The evaluation of effect (f²) and also predictive relevance (q²) confirms the key role of exogenous the latent variables ‘the ability to identify and apply knowledge’ at f² 0.07 (significant but small effect size) and q² at 0.10 indicates significant but small predictive relevance. Meanwhile the global criterion of goodness-of-fit (GOF) value falls at 0.30, which indicates medium level of compromise between the quality of the measurement and structural models. Thus, the model is fit for further statistical analysis.

The process of verifying relevant assessment criteria in respect of the PLS approach concludes at this point. The analysis indicates that all measures used are reliable and valid. Consequently, appropriate implications to explain the level of individual absorptive capacity which influences the individual knowledge acquisition can be derived from the analysis results.

Hypotheses Testing

The analysis of the structural model path coefficients shows that the predictor variables ‘the ability to apply knowledge’ exert the moderate influence on individual knowledge acquisition with path coefficient at 0.29. This is followed by the ability to identify knowledge, which exhibits noticeably lower path coefficients, at 0.18. The results of a bootstrapping analysis show that two of three relationships within the structural model are significant (p<0.05, one-tailed).

Table 2
The summary of hypothesized structural relationship between individual absorptive capacity and individual knowledge acquisition

Hypotheses	Relationship	Full Model			Supported
		β	S.E	T	
H1a	ABS → IKA				Partially Supported
H1a1	ABS1 → IKA	0.178204	0.061954	2.876**	Yes
H1a2	ABS2 → IKA	0.02602	0.074367	0.349	No
H1a3	ABS3 → IKA	0.293277	0.080582	3.639**	Yes

Note:(*) Significant at p<0.05, (**) Significant at p<0.01 base on one-tailed t-statistics table, as t-value greater than 1.65, it is significant at p <0.05, while t-value at 2.35 or greater, it is significant at p<0.01.

The result also indicates that the ability to identify knowledge has significant effect on the individual knowledge acquisition with coefficient value of 17.8 percent with T=2.88 which is significant at p<0.01. However, the ability of the HCN workers to assimilate knowledge in MNCs does not affect the individual knowledge acquisition. This is proven by a very small T value which is only at 0.3 with coefficient value of 0.02 percent. As for the ability to apply knowledge, there is a significant influence of this construct on individual knowledge acquisition, with beta value of 29 percent (T =3.64) and significant at p<0.01 with. Overall, hypothesis H2a and H2b are supported while H2b is not supported.

CONCLUSIONS

The empirical analysis provides support for the hypothesized cause-effect relationships in the model. The presented theoretical model explains approximately 20 percent of the variance on individual knowledge acquisition. Of three dimensions, the ability to identify and the ability to apply knowledge are found to have direct significant influence on individual knowledge acquisition. This situation indicates that the knowledge acquisition activities in MNCs require at least two basic capabilities, namely the ability to identify knowledge and the ability to apply knowledge. With the presence of these two abilities, the HCN workers will face no obstacles in acquiring knowledge in foreign MNCs. Problems in acquiring knowledge will cause problems among HCN workers to obtain additional skills, apart from their

fundamental skills that enable them to move forward in their careers, in addition to the enhancement of organization's productivity in the long run. In conclusion, the HCN workers who do not possess the above mentioned abilities will face difficulty to acquire knowledge at their workplace that will reduce their chance to grab the opportunity to gain the advanced knowledge from foreign MNCs that they work with.

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