THE OUTCOMES OF INDIVIDUAL ABSORPTIVE CAPACITY AMONG ACADEMICIANS IN MALAYSIAN PUBLIC UNIVERSITIES

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Abstract

Purpose of the Study: This paper investigates the ability of Malaysian public universities to achieve high academic standing within the top 100 world ranking universities depending on prolific and multitalented academicians who own multi-skills to support the universities’ academic excellence.

Methodology: A total of 800 questionnaires were distributed to all public universities in Malaysia for the purpose of data collection and a total of 342 questionnaires were returned representing a response rate of 42.75 percent. Data were analyzed using Partial Least Squares (PLS) and Structural Equation Modeling (SEM).

Results: This study has contributed to the nations by highlighting the current capabilities of academic workforce that will either influence or hinder the growth of their knowledge acquisition and innovative behavior that will influence the future of Malaysian academic excellence.

Implications: Academicians are under pressure to be prolific and versatile to achieve their universities’ goals in addition to their multitasking jobs including teaching, publication, consultation, research, and social welfare. Owing to that matter, the study on individual absorptive capacity, which refers to the ability of Malaysian academicians to absorb knowledge that determines their level of learning capabilities and leads to fulfilling universities’ and national agenda, is worth studying.

Keywords: Individual Absorptive Capacity, Malaysian Public Universities, Malaysian Academician, Teaching, Education

ACKNOWLEDGEMENT

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INTRODUCTION

Universities are organizations that perform a key role within contemporary societies by generating knowledge and educating large proportions of the population (Perrmann et al., 2013). Governments in the past funded universities for their research and teaching activities to ensure that universities transfer knowledge to economic agents (Rossi & Rosli, 2013). Additionally, academicians in Malaysian public universities had the ability to be highly-skilled and then make them innovative and creative. This area is largely focused on the learning capabilities of academicians to absorb knowledge and then apply it. Academicians need to have sufficient learning capabilities to absorb the transferred knowledge. However, there has not been an empirical investigation into the intensity of academicians’ absorptive capacity. There is limited research into the issue of academicians’ ability to advance their skills up to the level of highly-skilled labor.

Based on the Malaysia Education Blueprint 2015-2025 stated by Ministry of Education Malaysia (2015) and U21 Ranking of National Higher Education System (2014), it was mentioned that according to the Universities 21 (U21) report, Malaysia was ranked 28th out of 50 countries, while Singapore, Thailand, South Korea, Indonesia and Hong Kong were ranked 10th, 42nd, 48th, 15th, and 21st, respectively. The U21 report compares higher education systems in 50 selected countries through four different dimensions: resources, environment, connectivity, and output. According to the report, Malaysia was ranked 12th in the aspect of resources investment and was ranked at 44th in the production of outputs. The outputs were evaluated from research output, institutions ranking, enrolment, and graduate employability of a particular country. The results of U21 report imply that the amount of funds being invested in the Malaysian higher education sector does not match with the level of outputs being produced and therefore concern about the efficiency of public universities in Malaysia were raised. As Malaysia effortlessly strives to be internationally visible in terms of
having a good quality education and excellence in research, ensuring optimal outcome of higher education output on the basis of funds being invested is definitely crucial.

In addition, human capital plays an important role in achieving economic growth and development. The higher the level of education, the higher the distribution of income obtained by an individual (Islam et al., 2016). The deterioration of education quality in Malaysia is alarming, especially when the global ranking of local premier public universities continue to decline and the achievements are lagging behind other universities in the region (Hamzad, 2015). Moreover, our neighboring country, Singapore, has two universities, namely, National University of Singapore (NUS) and Nanyang Technology University (NTU), which made to the top 50 in the QS World University Ranking in 2016-17. However, none of Malaysian public universities managed to make the list of top 100 universities (QS Top Universities, 2017).

Organizational performance is viewed as the survival and profitability of an organization in which its measurement is primary in both manufacturing and services. The effectiveness and performance of service organizations are measured by their customers’ satisfaction and such organizations prefer good relationship over profit. The performance and effectiveness of manufacturing organizations are in the quality of their products and manufacturing organizations are more concerned with profit maximization (Islam & Abdullah, 2013; Islam & Al-Nasser, 2013; Islam & Al-Homayan, 2013; Al-Nasser et al., 2013a, 2013b, 2013c; Al-Homayan et al., 2013; Sarker & Islam, 2013; Al-Naser et al., 2015; Saad et al., 2016; Al-Nasser et al., 2016a, 2016b; Khan et al., 2017).

Human capital development is one of the most essential elements that has to be achieved by the Malaysian government, which is seeking to advance the country to the high-income group by 2020. Malaysia needs to strengthen the foundation of domestic skills and talent development, which involves improvements in the education system, training system, and industrial training system to achieve this goal. In the process of transforming the economy towards the knowledge-based economy, the Malaysian government has put significant efforts to improve the higher education sector. Malaysia is one of the biggest spenders in higher education, yet its performance is still less than ideal. It was found that more than 90 percent of Malaysian public universities’ expenditure is funded by the government as stated in the Malaysia Education Blueprint 2015-2025 (Ministry of Education Malaysia, 2015). However, many have criticized the unsatisfactory performance of Malaysian public universities as compared to other countries despite the government’s allocation of budget for education being among the highest in the world on the basis of the percentage of Gross Domestic Product (Hamzah, 2015).

The goal of this study of being a high-income country in the year 2020 requires a serious transformation in the development of human capital as well as the outcomes of individual absorptive capacity among academicians in Malaysian public universities.

LITERATURE REVIEW

Individual Absorptive Capacity

The concept of absorptive capacity is the ability to absorb knowledge from the environment in an organization and it can be applied by individuals who work in organizations (Ahmad, Mohamad, & Ibrahim, 2013b; Da Silva & Davis, 2011; Liu, Feng, Hu, & Huang, 2011). The ability to identify the value of new external knowledge which then absorb, transform, and utilize are needed (Cannon, Geddes, & Feinstein, 2014). This can be explained by individuals in an organization, who create and store knowledge (Löwik, 2013). In general, individual absorptive capacity influences the organizational learning capacities (Tang et al., 2010) when knowledge is transferred in the organization. Thus, there is a need to extent the concept of absorptive capacity at the individual level (Tang, Mu, & MacLachlan, 2010). The development of individual absorptive capacity is important for an organization, because it will finally lead to improve their performance and increase competitive advantage.

Besides that, Hamel (1991) emphasized that individual absorptive capacity is not distributed equally in an organization. All of the individual have different knowledge absorptive capacity due to the prior related knowledge (Richards & Duxbury, 2015). Moreover, not all individuals need to have same skills to identify, interpret, apply, and improve the knowledge in an organization (Hamel, 1991). Because of the different levels of individual absorptive capacity, the effectiveness of the knowledge transmission in either inter- or intra-organization will be lower in view of the fact that individual employees in an organization play an important role in the overall knowledge transfer process (Tang et al., 2010). This is supported by Kwok and Gao (2016) who stated that individuals who have higher level of absorptive capacity will be more competent in learning, assimilating, and applying knowledge. Hence, the initiative to strengthen individual absorptive capacity in the organization is important in order to stimulate organizational absorptive capacity
that results in better organizational performance and state-of-the-art of innovation (Lichtenthaler & Lichtenthaler, 2009).

Individual Knowledge Acquisition

Knowledge is a combination of intangible features, such as rarity, imperfect immutability, and substitutability, upon which sustainable competitive advantages are built. Hence, an inherent need prevails for firms to continuously explore and exploit new knowledge (Barnes, Leonidou, Siu, & Leonidou, 2015). Generally, knowledge acquisition is a part of knowledge management that has been widely practiced among firms, especially those who want to gain specific knowledge in a specific context. According to Huber (1991), knowledge acquisition is the process by which knowledge is obtained. Specifically, knowledge acquisition is defined as “acquiring information directly from domain experts” (Mykytyn, Mykytyn, & Raju, 1994, p98). It also refers to the activities that firms’ employees may be involved to recognize and acquire tacit or explicit knowledge (Zahra & George, 2002). During that process, organizational members need to identify the value of knowledge, acquire it, and apply it to daily tasks in their organizations (Cohen & Levinthal, 1990; Zou et al., 2016).

Many scholars in international business define knowledge acquisition differently, and view knowledge acquisition as an organizational level construct that is applied between firms and not individuals (Evangelista & Hau, 2009; Lyles & Salk, 2007; Prod, Carlos, Valio, & Gonzalez, 2016). Researchers are also looking at the concept of knowledge acquisition as a process that happens at the organizational level only. On the other hand, many other scholars (Ahmad & Hartini, 2015; Anderson, 1987; Hashim, 2008; Politis, 2005) view knowledge acquisition as individual constructs that are applied at the individual level. This is supported by Polanyi (1967), who stated that organizational knowledge is actually rooted in individuals and must be acquired at the individual level before it is transformed into organizational knowledge.

Other scholars, however, recognize knowledge acquisition as a behavior applied at the individual level in an organization (Minbaeva, Mäkelä, & Rabbiosi, 2010; Pedrosa & Jasmand, 2011). In addition, (Bourdieu, 1990) also agreed that knowledge acquisition is an individual behavior that is derived from individual interaction with tasks, resources, and people within a particular situation. Furthermore, knowledge acquisition is suitable to be measured as individual behavior and analyzed at the individual level since individuals in firms are those who acquire knowledge while organizations just create context for individuals to support the knowledge acquisition process (Thuc Anh, Christopher Baughn, Minh Hang & Neupert, 2006).

Additionally, individuals are naturally heterogeneous, and therefore their capability to acquire knowledge and the behavior of knowledge acquisition itself will come at different levels (Minbaeva, Dana B.; Mäkelä, Kristiina; Rabbiosi, 2010), especially when individual behavior occurs in the context of intra-organizational knowledge transfer, where individual knowledge acquisition is really needed. In order to absorb knowledge transferred from transferor, employees always need to have prior knowledge related to that area to smoothen the knowledge acquisition process (Cohen & Levinthal, 1990). Moreover, knowledge acquisition also involves acquiring information and knowledge that is to be applied for problem solving activities. In this perspective, individual cognition will take place in order to facilitate how data are acquired, organized, assimilated, and applied within a specific organizational context (Lemon & Sahota, 2004).

Individual Innovative Behavior

Individual innovative behavior, often referred to in other text as innovation work behavior, refers to the contributions of individuals in terms of developing innovations and therefore encompasses any work activities that are carried out individually in the relation to the development of innovation (Messmann & Mulder, 2012). In order for an organization to become more innovative, they need to capitalize on the ability of their employees to innovate (de Jong & Den Hartog, 2007), since it is the characteristics and behaviors of people in organizations that are at the core of organization innovation (Patterson, 2015).

Innovation in an organization is defined as “the development and implementation of new ideas by people who over time engage in transactions with others within an institutional order” (Van de Ven, 1986, p590). Innovation is derived from many aspects, such as inventiveness, adaptation, experimentation, readjustment, and cognitive and socio-political efforts from individual employees (Stone, 1981; Scott & Bruce, 1994). Creative ideas that come from individual employees are a foundation of all organizational innovations (Scott & Bruce, 1994) since individual employees are the ones who develop the ideas, discuss and modify them, and implement them into action (Van de Ven, 1986).
Typically, individual innovation starts with generating a novel and useful idea in any field (Amabile, Conti, Coon, Lazenby, & M, 1996), followed by the promotion of that idea, resulting in a prototype or model of the innovation before it is implemented (Scott & Bruce, 1994). Innovation starts with individual employees and is then turned to a complex and sophisticated process to reach the stage of organizational innovation. An integration of teamwork based on specialized knowledge, competence, and specific roles is required to achieve a complete set of organizational innovations (Janssen, 2000). Individual innovation which begins with individual innovative behavior acts as a strong foundation for organizational innovation activities. Innovative behavior comprises idea generation, idea promotion, and idea realization and refers to the creation, introduction, and application of new ideas in order to give better performance for a group or organization (Scott & Bruce, 1994). In addition, innovative behavior also involves the invention of something new that can be beneficial to firms (Spreitzer, 1995).

METHODOLOGY

The positivist perspective emphasizes on quantitative research techniques to achieve the research objectives. Self-administered questionnaires were the major survey instruments for data collection in the present study. Large amount of data from a sizeable population can be obtained by using questionnaires (Zikmund, Babin, Carr, & Griffin, 2013). In addition, large sample size makes the generalization of results possible (Saunders, Lewis, & Thornhill, 2015). This is a cross-sectional design as the data was collected at one point in time.

The population of the study comprised of academicians from Malaysian public universities. According to the MOHE (2015), there are totally 31,877 academic staffs in public universities. The reason for applying various techniques in the data collection procedure is due to the ability of this combination technique to gain a higher response rate (Parker, 1992; Schaefer & Dillman, 1998).

In data analysis, Partial Least Squares-Structural Equation Modeling (PLS-SEM) is applied to examine the relationship between variables. PLS-SEM is more appropriate for analyzing the predictive model rather than theory testing model (Hair, Black, Babin, & Anderson, 2010). Conceptually, the partial least squares (PLS) is similar to multiple regression analysis because both objectives are to maximize the explained variance in the endogenous constructs (Marcoulides, Chin, & Saunders, 2009). Thus, PLS analysis was utilized, as it is the most appropriate method to meet the research objectives and adapt to the research data conditions.

Theoretical Framework

The theoretical framework shown in Figure 1 is developed on the basis of the study objective, which is to examine the effect of individual absorptive capacity on individual knowledge acquisition and individual innovative behavior among academicians in Malaysian public universities. The hypotheses for this study are also formulated on the basis of the theoretical framework, as discussed in the later sections.

**Figure 1. Theoretical Framework**

**Individual Absorptive Capacity and Individual Knowledge Acquisition**

Absorptive capacity has been used to explain how organizations assimilate knowledge. However, an organization’s absorptive capacity depends on the absorptive capacity of its individual members (Liu et al., 2011). The higher the level of an individual’s absorptive capacity the easier it is for an individual to acquire and retain new knowledge (Fichman & Kemerer, 1997). The Gale Encyclopedia of Education (Guthrie, 2002) defines knowledge acquisition as the process of absorbing and storing new information in memory. Similarly, Grant (1996) defines knowledge acquisition as the addition of knowledge to an existing knowledge base.

In brief, individual absorptive capacity refers to the capability of an individual to understand new knowledge, assimilate it, and apply it to activities that can be commercialized (Hurtado, Valle, Hernandez, & Valle, 2015; Ko, Kirsch, & King, 2005; Ter Wal, Criscuolo, & Salter, 2011). At the individual level, absorptive capacity potentially influences the knowledge acquisition behavior of an individual since the behavior of acquiring knowledge relies on an individual’s capabilities, especially their prior related knowledge in the respective areas (Cohen & Levinthal, 1990). In knowledge
acquisition process, absorptive capacity is perceived to be very important during that process (Murray & Chao, 2005; Richards & Duxbury, 2015). Knowledge acquisition behavior is a process in which knowledge is acquired from any domain expert or any authenticated source of knowledge (Mykytyn et al., 1994). This behavior can also be viewed as a learning process labeled as the main stage of the individual learning process (Zhang, Baden-Fuller, & Mangematin, 2007). In the individual learning process, the capability of an individual to learn, including prior knowledge and skills, is a prerequisite for successful knowledge acquisition (Mykytyn et al., 1994).

Prior related knowledge, such as fundamental skills, shared language or basic knowledge in scientific and technological areas, on the other hand, present the true ability of an individual to acquire specific knowledge (Kwok & Gao, 2016). Specifically, that capability refers to the absorptive capacity of individuals that may vary from one to another due to differences in their professional experience, educational background, and prior working experience (Kwok & Gao, 2016). Related to knowledge acquisition, individuals with larger absorptive capacity will potentially have better knowledge acquisition since the relationship between individual absorptive capacity and individual knowledge acquisition is expected to be present (Kwok & Gao, 2016; Murray & Chao, 2005; Mykytyn et al., 1994), but the density and strength of the relationship are not yet known. Therefore, this study empirically investigates the direct linkage between individual absorptive capacity and individual knowledge acquisition. Hypothesis one is as follows:

**Hypothesis 1:** Individual absorptive capacity will positively influence individual knowledge acquisition among academician in Malaysian public universities.

**Individual Absorptive Capacity and Innovative Behavior**

Specifically, despite the fact that Cohen and Levinthal (1988, 1990) proposed a theoretical framework where absorptive capacity leads to innovative capabilities, and some studies in the literature attempt to explore the relationship between individual absorptive capacity and individual innovative behavior (Ahmad, Mohamad, & Ibrahim, 2013a; Ebers & Maurer, 2014), there is a limited understanding on how absorptive capacity initiate academian innovative behavior.

Individual innovativeness originated from the creative behavior of an individual and is perceived to have a close relationship with the cognitive and non-cognitive abilities of an individual (Woodman, Sawyer, & Griffin, 1993). From there, the influence of cognitive and non-cognitive capabilities suggest a point of integration between individual absorptive capacities and individual innovation (Woodman et al., 1993). Individual absorptive capacity refers to the capability to acquire, assimilate, transform, and exploit (Zahra & George, 2002) and is a combination of cognitive and non-cognitive capabilities. The ability to acquire and assimilate knowledge can be grouped under cognitive capabilities, since it involves an individual’s internal capabilities while the ability to transform and exploit depends on an individual’s external environment, such as management approval and the organizational policies. The combination of all cognitive and non-cognitive capabilities symbolizes the concept of individual absorptive capacity in the organizational context that can provide some implications for individual innovativeness (Cohen & Levinthal, 1990; Zahra & George, 2002). When individual innovativeness is translated into any innovative activity, it can be labeled as individual innovative behavior.

Individuals normally tend to exhibit an innovative behavior when their capabilities (absorptive capacity in this context) are higher (Mumford, Scott, Gaddis, & Strange, 2002). The explanation behind this is related to the view that the capability to innovate requires enough information and knowledge in any related area. To obtain that knowledge, individuals must have the ability to absorb knowledge before they can manipulate it into something better. Without that capability, it is difficult for a person to innovate because innovation requires creative ideas that are generated from the acquired knowledge. In order to get knowledge, they must absorb knowledge or possess absorptive capacity. Therefore, the second hypothesis is proposed as follows:

**Hypothesis 2:** Individual absorptive capacity will positively influence individual innovative behavior among academician in Malaysian public universities.

**RESULTS AND DISCUSSION**

A total of 800 questionnaires were distributed to all public universities in Malaysia for the purpose of data collection and a total of 342 questionnaires were returned representing a response rate of 42.75 percent. Researchers such as Hair, Black, Babin, and Anderson (2010), and Sekaran (2003) have recommended that the response rate of 30 percent for survey are fit for analysis. Thus, the valid response rate of 42.75 percent is adequate for conducting further analysis in this study.
Reliability Analysis

Reliability is an estimation of the consistency level among multiple measurements of a construct (Hair et al., 2010). Therefore, the reliability for each measure was examined by computing its Cronbach’s alpha. Table 1 below summarizes the reliability analysis for all constructs with the Cronbach’s Alpha value in the range of 0.7469 to 0.9589. This portrays good internal consistency and supports the recommended reading of above 0.60 by Hair et al. (2010).

Table 1: Reliability Measurement

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Number of Indicators</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAC</td>
<td>10</td>
<td>0.8938</td>
</tr>
<tr>
<td>IKA</td>
<td>4</td>
<td>0.7469</td>
</tr>
<tr>
<td>IIB</td>
<td>14</td>
<td>0.9589</td>
</tr>
</tbody>
</table>

Note: IAC = Individual Absorptive Capacity, IKA = Individual Knowledge Acquisition, IIB = Individual Innovative Behavior, and IWP = Individual Work Performance.

Analysis of the Measurement Model

The assessment of the measurement model (outer model) is the first step of PLS-SEM analysis. Generally, it is required to evaluate whether it is suitable and good for further statistical assessment, by reviewing its statistical elements that load theoretically and associate with the respective constructs. This study examines the measurement model by using Smart PLS version 2.0 M3 to verify convergent reliability.

Convergent validity is the degree to which the items of a particular scale measure the same constructs (Hair et al., 2010). Therefore, the test of convergent validity needs to be conducted for all variables to examine the item’s loading, Average Variance Extracted (AVE) and composite reliability (Fornell & Larcker, 1981). Convergent validity exists when the item’s loading is greater than 0.50, AVE for each construct must also be greater than 0.50, and the composite reliability must be greater than 0.70 (Hair et al., 2010).

Table 2: The Convergent Validity Assessment Results

<table>
<thead>
<tr>
<th>Model Construct</th>
<th>Measurement Item</th>
<th>Loadings</th>
<th>AVE</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAC</td>
<td>A5</td>
<td>0.6308</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A6</td>
<td>0.6353</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A7</td>
<td>0.7307</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A8</td>
<td>0.6730</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A9</td>
<td>0.6510</td>
<td>0.5128</td>
<td>0.9127</td>
</tr>
<tr>
<td></td>
<td>A10</td>
<td>0.7561</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A11</td>
<td>0.7596</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A13</td>
<td>0.7451</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A14</td>
<td>0.7880</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A15</td>
<td>0.7687</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IKA</td>
<td>B1</td>
<td>0.6859</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B2</td>
<td>0.7673</td>
<td>0.569</td>
<td>0.8404</td>
</tr>
<tr>
<td></td>
<td>B5</td>
<td>0.7993</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B6</td>
<td>0.7603</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IIB</td>
<td>D1</td>
<td>0.7491</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>0.7664</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>0.7276</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D5</td>
<td>0.8112</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D6</td>
<td>0.8426</td>
<td>0.6712</td>
<td>0.9555</td>
</tr>
<tr>
<td></td>
<td>D7</td>
<td>0.8647</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D8</td>
<td>0.8412</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D9</td>
<td>0.8428</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note: IAC = Individual Absorptive Capacity, IKA = Individual Knowledge Acquisition, and IIB = Individual Innovative Behavior.

As shown in Table 2, the items loading for every item are greater than 0.50 excepted A1, A2, A3, A4, A12, B3, B4 and D4 and they were removed because the loadings were lower than 0.50. Moreover, the value of AVE for all constructs ranged between 0.5128 and 0.6712, which are greater than 0.50 indicating a good level of construct validity and having strong validity of this study (Fornell & Larcker, 1981). Next, the composite reliability also exceeded the recommended value of 0.70 which ranged from 0.8404 to 0.9555. Therefore, these results confirmed the convergent validity of the measurement model.

Analysis of the Structural Model

Once the constructs in the measurement model proved to be reliable and valid (Anderson & Gerbing, 1988), an assessment of structural model (inner model) needs to be conducted to test the underlying hypotheses. The structural model specification employs the R square (R2) values to determine the amount of variance explained by exogenous variables towards the endogenous variable. According to Hair et al. (2010), the R2 value shows how well the model is performing. Therefore, by refering to the criteria provided by Cohen (1988), the R2 value more than 0.32 is considered as substantial, 0.15 as moderate, and 0.02 as weak. As depicted in Table 3, the R2 value of IKA and IIB is 28.55 percent and 28.45 percent, respectively, which is at a substantial level.

Further support of AVE value which greater than 0.50 for all constructs surpass the acceptable value for a particular model. Communality value being greater than 0.50 also meets the requirement of the study (Hair et al., 2010). Furthermore, the redundancy values for all construct are small and act as additional support in this study. Thus, after illustrating the structural model specification, all constructs have met the basic requirements.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Level of Construct</th>
<th>R Square</th>
<th>Redundancy</th>
<th>Communality</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAC</td>
<td>First Order</td>
<td>0.0726</td>
<td>0.5128</td>
<td>0.5128</td>
<td></td>
</tr>
<tr>
<td>IKA</td>
<td>First Order</td>
<td>0.0976</td>
<td>0.5690</td>
<td>0.5690</td>
<td></td>
</tr>
<tr>
<td>IIB</td>
<td>First Order</td>
<td>0.1849</td>
<td>0.6712</td>
<td>0.6712</td>
<td></td>
</tr>
</tbody>
</table>

Note: Significant level R2 (Cohen, 1988) : >0.32 (Substantial) ***, >0.15 (moderate)**, >0.02 (weak)*. Where IAC = Individual Absorptive Capacity, IKA = Individual Knowledge Acquisition, and IIB = Individual Innovative Behavior.

Moreover, in order to confirm whether or not the part coefficients are statistically significant, T-values with each path coefficient were generated. Therefore, this section reports the findings of the path relationship and direction between constructs in this study. Table 4 shows positive relationships existing at the significant level of p<0.10. The part coefficients value for this study is 0.27 and 0.48.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T Statistics</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>IAC -&gt; IKA</td>
<td>0.2697</td>
<td>0.0443</td>
<td>6.09</td>
<td>Yes</td>
</tr>
<tr>
<td>H2</td>
<td>IAC -&gt; IIB</td>
<td>0.4820</td>
<td>0.0513</td>
<td>9.39</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: Significant at p<0.10 base on one-tailed t-statistics tables, as t-value greater than 1.96, where IAC = Individual Absorptive Capacity, IKA = Individual Knowledge Acquisition, IIB = Individual Innovative Behavior.

Hypothesis testing is a process in which the hypotheses of the study are tested using suitable statistical analysis and assumptions. Thus, the last step of statistical analysis was to test the hypothesized relationship of the study by running bootstrapping in Smart PLS program. A bootstrapping procedure with 5000 re-sampling iteration was applied to confirm the hypotheses. Moreover, Hair et al. (2010) confirmed that when paths are not significant or in the opposite signs...
against the hypothesized direction, the prior hypothesis should not be supported. The results provide evidence for the hypothesized relationships between exogenous variables and endogenous variables where H1 and H2 are supported. For H1, the results revealed that the relationship between individual absorptive capacity (IAC) and individual knowledge acquisition (IKA) of academic staff in public universities in Malaysia was highly significant ($\beta = 0.27$, $t = 6.09$) and hence the hypothesis was supported. IAC and individual innovative behavior was highly significant ($\beta = 0.48$, $t = 9.39$) and thus, H2 was supported.

Overall, individual absorptive capacity has positively influenced both individual knowledge acquisition and individual innovative behavior. This result is parallel to that of Murray and Chao (2005), Mykytyn et al. (1994), and Kwok and Gao (2006). It is found from these studies that the ability to absorb knowledge is crucial in the academic world. It is a core element that should be taken into account in the selection of faculty members at the university level. The presence of this element would be able to generate more prolific and competitive academic staff. In a context of the national level, the ability to absorb knowledge or individual absorptive capacity should gain more attention among policy makers as it involves the national agenda to raise the academic standards of Malaysian universities to the world level. In addition to this, the ability to absorb knowledge is also an important platform for the generation of more advanced knowledge and technological innovations. Thus, it can be said that this ability can act as important catalyst to raise the level of national education to a higher level.

**CONCLUSION**

Despite the acknowledged limitations of the study, the finding of this study has contributed to the body of the knowledge by measuring the level of individual absorptive capacities of academicians in Malaysia. In addition, it has also highlighted the importance of individual absorptive capacity as the predictor variable for individual knowledge acquisition and individual innovative behavior. By knowing this, the policy makers have no option except to figure out on how to strengthen this capability as it is proven to influence one’s knowledge acquisition and innovative behavior. This research has also opened up ideas for further exploration in individual absorptive capacity research to overcome the limitations encountered by the researcher of the present study.

**REFERENCES**


