

ABSTRACT

This study investigates the development of Absorptive capacity (ACAP). To do that, this study adopts two views about ACAP that has been discussed by the founding fathers of this construct. First, ACAP is considered as an accumulation of knowledge when it first introduced by Cohen and Levinthal (1990) of which put more orientation to the result as evidence of the construct existence. Second, ACAP is viewed as a part of organizational capacity considered to be important factors to drive innovation in an organization as well as to increase individual quality (Lane et al 1996, Zahra and George 2002). This study combines these two perspectives by conducting research on the ACAP construct by examining the formation process as well as confirming at its results. The thinking framework used is cognitive learning theory that supports the learning process and behavioral learning theory that emphasizes learning outcomes as the achievement of the learning process. This study adopts the model from Sun and Anderson (2010) inserting the ACAP process into Organization Learning (OL) model from Crossan et al. (1999) to test the concept. In addition to that, this study is also injecting two groups of conceptual moderating factors, i.e., Social Integration Mechanism (SIM) and Regime of Appropriability (ROA). Each of group consists of two moderating variables, Formal and Informal representing SIM with Learning and Cohesive representing ROA. The underlying concept to develop these moderating factors are based on Knowledge Based View theory, together with project management concept as well as team learning.

To implement the concept, this study undertook a longitudinal study from *Kuliah kerja Nyata* (KKN) program at Universitas Gadjah Mada for the period June – August 2019. There are 2.444 eligible participants (out of 5.338 registered participants) coming from various faculties and entry year. The questionnaire consists of three sections; i.e., section one about KKN (37 close ended questions and 1 open ended question), section two about ACAP and moderating variables (61 valid and reliable questions), and section three about demographic data. There are six stages of ACAP process where a statistical model is built on each of them. The outcome process is captured by comparing the participants' answers at the beginning (t0) and end (t1) of the KKN project. Hierarchical Linear Model (HLM) is used to depict the six process models, t-test and Wald test are used to compare the quality of the outcomes together with MRA and beta difference test to test the moderating variables.

The result confirms the overall ACAP process, both the six stages and the outcome. Thus, the proposed concept of ACAP as part of the OL and learning is confirmed. The ACAP process can be viewed as part of the OL process and all the consequences. Meanwhile, the outcome of ACAP also confirms that the accumulation of knowledge exists and also can be used as a metric for many purposes. The metric, proven by this study, is backed up with evidence of a thorough full cycle building process. Further use of ACAP as one independent metric can rely on this research's finding. However, the moderating variables are mainly rejected due to the failure to prove their dominance to the non-moderating models although the beta values are significant. In further elaboration, the

unsupported result reveals the presence of the U phenomenon, which suggests that moderation could acquire greater dominance when the project is repeated or when the individual knowledge or capacity is higher.

To sum up, this study undertakes hypothesis testing on the ACAP process as part of the learning theory framework. It confirms the idea of mixing ACAP process as part of the OL process as well as setting the ACAP to become a part of organizational capacity. Thus, future research can amplify the ACAP process or elaborate the interrelation between ACAP and OL. This study introduces the use of HLM to depict the ACAP multilevel process and the use of loading score value as the based value variables to mitigate the multicollinearity problem. From managerial perspective, organizations can utilize the ACAP cycle to establish a development program for their people and create their own organization idiosyncratic knowledge. As for KKN project, this study reveals the importance of having a more systematic evaluation over the project so that the project can be adopted in line with the long-term effect of the KKN to the participants, the stakeholders and the KKN unit.

Keywords: Absorptive Capacity, Organizational Learning, Full Cycle Process, Knowledge Accumulation.