

# THE DEVELOPMENT OF CRITICAL SUCCESS FACTORS, BENEFITS AND CHALLENGES FOR HIGHER EDUCATION FOR SUSTAINABLE DEVELOPMENT MODEL (HESD) IN MALAYSIAN PUBLIC HIGHER INSTITUTIONS

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## ABSTRACT

*Sustainable development as well as effective practices is important in higher education. Higher education institutions are facing challenges specifically in sustainability. Thus, the objective of this study is to identify the critical success factors, benefits, and challenges for higher education sustainable development and also to develop the propose model for higher education sustainable development in Malaysian Public Higher Institutions. Critical success factors (CSFs) of sustainable development consist of knowledge, education, awareness, training, and organizational structure. Meanwhile, benefits of sustainable development such as environmental sustainability, integrated sustainability, institutional sustainability, promote sustainability, and quality improvement in order to address sustainable issues in higher education. The challenges of sustainable development are lack of involvement, lack of funding in managing sustainable development, and lack of policy. Population of this study comprised of 20 Malaysian Public Higher Institutions. In this study, the Statistical Package for the Social Sciences (SPSS) version 22.0 will use to analyze the preliminary data and provide descriptive analysis such as means, standard deviations, and frequencies. Structural Equation Modeling (SEM) techniques and AMOS 22.0 will used to test the measurement model. Besides, for factor analysis such as Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) are used to examine the constructs in this study. The finding of this study may indicate the development for higher education sustainable development (HESD) model and provides guideline and references for Malaysian Public Higher Institutions.*

**Keywords:** Higher Education Institution, Sustainability, Higher Education for Sustainable Development.

## INTRODUCTION

Sustainable development as well as effective practices is important in higher education. Higher education institutions are facing challenges specifically in sustainability. The Malaysian government has placed greater emphasis on the sustainable development of higher education institutions during the last decade. Kaur & Sirat (2010) argue that the Plan can be considered as Malaysia's key policy initiative towards revolutionizing and transforming the higher education sector. An important policy focus on the government agenda is to turn Malaysia to a major

regional hub for higher education. Amran et al. (2010) stated that higher education should be a resource for sustainability. Higher education is beginning to include sustainable development concepts in their activities. Efforts in education for sustainable development are important to improve sustainability for Malaysian Public Higher Institutions.

In recent time, sustainability challenges as well as effective practices in higher education. Higher education institutions are facing contribution to sustainability (Tilbury, 2011). The academic programs offered by the higher education in Malaysia to see how these institutions are addressing of sustainability issues in their academic programs. Sustainability education suggests for improving sustainable development in the academic courses and research (Etse & Ingley, 2016). However, this study of sustainable development still lacking implemented and little attention has been paid for having awareness and willingness to work for sustainable development (Natkin & Kolbe, 2016). The implementation of sustainable development combines the aspects of policy and management of processes in institutions, particularly for Malaysian Public Higher Institutions. Hence, this study focuses on higher education of sustainable development for Malaysian Public Higher Institutions.

Sustainable development refers to the development of the most proactive and practical in addressing the environmental issues. It is a goal at the societal level and achieving such requires approach and practices from organizations (Nwanzu & Babalola, 2019). According to Mahat & Idrus, (2017), sustainable development can be achieved by using an educational approach. Therefore, the main driver of the education for sustainable development is important in this study. In education approach, sustainable development is one of the best methods to get information in higher education towards environmental awareness. Sustainable development assists to achieve awareness, knowledge, attitude, and behavior about environment (Chiong et al., 2017). Sustainable development requires effective pedagogy to ensure a participatory teaching and learning method can ensure sustainability in higher education (Foo, 2013; Reza, 2016). In addition, education of sustainable development is crucial to learning to improve the quality of the environment (Mahat et al., 2016; Wu & Shen, 2016). In Malaysia, the implementation of sustainable development in higher education is to enhance program designed to promote sustainability among students. However, there is a little attention for sustainable development in the higher education (Reza, 2016). In order to improve the sustainable development in higher education, educators play an important role to enhance the sustainability in effectively and efficiently, especially for Malaysian Public Higher Institutions. The sustainability development in Malaysian Public Higher Institutions is important to improve the sustainability as it is the current paradigms, structures as well as effective practices in higher education.

Critical success factors (CSFs) are proposed to ensure the success and performance of the organization mainly for Malaysian Public Higher Institutions. Therefore, in this study, all dimensions of the CSFs identified from the previous researches focusing on Higher Institutions. This study proposes six dimensions of CSFs of sustainable development consist of knowledge, education, awareness, training, and organizational structure. By implementing sustainable development, thus higher education plays a leading role in achieving sustainable development. Higher educations are facing challenges as they need a contribution to sustainability. According to Aleixo et al. (2018), the challenges of sustainable development are lack of involvement, lack of funding in managing sustainable development, and lack of policy. Therefore, there is a gap in sustainable development implementation in higher education. This study focused on three challenges which is lack of involvement, lack of funding, and lack of policy. This is because

three challenges for sustainable development can be determined in order to improve the performance of higher education, particularly in Malaysian Public Higher Institutions.

This study is important for helping institutions to improve higher education sustainable development in Malaysian Public Higher Institutions. Therefore, this study is focused on benefits for sustainable development such as environmental sustainability, integrated sustainability, and institutional sustainability, promote sustainability, and quality improvement in order to address sustainable issues in higher education. Thus, this study aims to identify the critical success factors, benefits, and challenges for higher education sustainable development in Malaysian Public Higher Institutions. This study will help to develop the propose model for higher education sustainable development in Malaysian Public Higher Institutions.

## LITERATURE REVIEW

The following section will discussed the development of critical success factors, benefits, and challenges for higher education for sustainable development model in Malaysian public higher institutions:

### **Critical Success Factors (CSFs) for Higher Education Sustainable Development**

Critical Success Factors (CSFs) as well as the benefits and obstacles of sustainable development should be determined in order to improve the performance of higher education. Meanwhile, there are an increasing number of empirical researches in identifying the level of benefits and obstacles in implementing sustainable development initiatives (Viegas et al., 2016). However, sustainable development is still lacking in Malaysia, thus the investigation of the benefits and obstacles in sustainable development is important to be identified. Sustainable development is lacking in higher education institutions (Blaze Corcoran & Koshy, 2010). Based on this, they found that there is a lack of knowledge in sustainable development. Given the important role education plays in knowledge, skills, and perspectives for sustainable development. Niu et al. (2010) noted that the improvement in sustainable education is significant element in higher education. The author suggested for developing sustainable education is fundamental for sustainable development.

Another of CSFs sustainable development is to identify the sustainable awareness. Aleixo et al. (2018) noted that sustainable awareness can use as a sustainable development instrument. This is because the lack of awareness of sustainable development in higher education. Study by Aznar Minguet et al. (2011), there is lack of training in managing the sustainable development. In order to achieve of sustainability training, this study can develop strategies to improve sustainable development in higher education. In fact, higher education can implement sustainability training to enhance sustainable development among students. Lastly, to encourage effective sustainable development is organizational structure. However, the university's organizational structure is still lacking due to management, students, and faculty about sustainable development. Therefore, organizational structure is important to this study to resolve the sustainable development issues. This study, thus proposes that five dimensions of CSFs of sustainable development consists of knowledge, education, awareness, training, and organizational structure.

## **Benefits for Higher Education Sustainable Development**

Education for sustainable development refers to education which aims to empower the individuals to build a sustainable future. The sustainable development aspects of the institutional can increase identification of the significant role of education in encouraging sustainable development (Falkenberg & Babiuk, 2014). In addition, sustainable development approach has the advantage to bring more focus on environmental sustainability, integrated sustainability and institutional sustainability, promote sustainability, and quality improvement (Wu et al., 2015; Chiong et al., 2017; Natkin & Kolbe, 2016). Overall, there is an evaluation of sustainability education programs, particularly in higher education contexts. This study is important not only for helping institutions to improve sustainable development, but also for enhance contributions the extent to which such programs achieves their goals and how they might be implemented. Thus, this study focused on benefits of sustainable development such as environmental sustainability, integrated sustainability, and institutional sustainability, promote sustainability, and quality improvement in order to address sustainable issues in higher education.

## **Challenges for Higher Education Sustainable Development**

There are several challenges of promoting sustainable development and practice in higher education, the impact is significant to demonstrate immediate success is relatively under-developed (Jenny Su & Chang, 2010; Franco et al., 2018). Consequently, higher education must orientate time and professional commitments for sustainable development in Malaysian Public Higher Institutions. According to Aleixo et al. (2018), one of the challenges of sustainable development is lack of involvement. The lack of involvement is such as professors, lecturers, students, staff, and communities in sustainable development. Another issue is lack of funding (Leal Filho et al., 2018) in managing sustainable development. This is because lack of resource and available funding is a major concern for sustainability initiatives in higher education. Other notable problem is lack of policy (Franco et al., 2018). For example, lack of policy, curriculum and practice to encourage sustainability in higher education. Therefore, there is a gap in sustainable development implementation in higher education.

## **Research Objectives**

There are four research objectives in this research:

1. To identify critical success factors for higher education sustainable development in Malaysian Public Higher Institutions.
2. To identify benefits for higher education sustainable development in Malaysian Public Higher Institutions.
3. To identify challenges for higher education sustainable development in Malaysian Public Higher Institutions.
4. To develop the propose model for higher education sustainable development in Malaysian Public Higher Institutions.

## **METHOD**

The first phase of the research activities performed is the critical success factors, benefits, and challenges for higher education sustainable development in Malaysian Public Higher Institutions. All these research activities will conduct to identify the critical success factors

(knowledge, education, awareness, training, and organizational structure), benefits (environmental sustainability, integrated sustainability, institutional sustainability, promote sustainability, and quality improvement), and challenges (lack of involvement, lack of funding, and lack of policy) for higher education sustainable development in Malaysian Public Higher Institutions. This research will use a research model using structural equation modeling (SEM) for developing the propose model of higher education sustainable development in Malaysian Public Higher Institutions. Finally, the procedure for determining the population, selection of the Public Higher Institutions in Malaysia for pilot study and full survey, as well as the procedure for obtaining, and permission to engage the research undertaken will determined in this phase. In the second phase, the research activities focused on data collection. This comprises of send the survey instrument for conducting a pilot study. The third phase, the research activities on data screening and analysis. The input data was in Statistical Package for the Social Sciences (SPSS) format and then analyze using SPSS and SEM. Population of this study comprised of 20 Malaysian Public Higher Institutions. In this study, the SPSS version 22.0 will use to analyze the preliminary data and provide descriptive analysis such as means, standard deviations, and frequencies. For factor analysis such as Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) are used to examine the constructs in this study. Besides, SEM techniques and AMOS 22.0 will used to validate of the measurement model.

## CONCLUSION

The finding of this study may indicate the development for higher education sustainable development (HESD) model for Malaysian Public Higher Institutions. In terms of the empirical, this study is to identify the critical success factors (knowledge, education, awareness, training, and organizational structure), benefits (environmental sustainability, integrated sustainability, institutional sustainability, promote sustainability, and quality improvement), and challenges (lack of involvement, lack of funding, and lack of policy) for higher education sustainable development in Malaysian Public Higher Institutions. In terms of the practical, this study provides guideline and references for Malaysian Public Higher Institutions. The proposed model in this study would be valuable references for Malaysian Public Higher Institutions. The research findings would lead to a better understanding and provide new insights for higher education sustainable development in Malaysian Public Higher Institutions. Linkages with critical success factors and the Sustainable Development Model (HESD) will be addressed in future research.

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