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Talent development model for a career in Islamic banking institutions: A SEM approach

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Abstract: Presently the Malaysian Islamic banking brand name has surged drastically into the mainstream platform. In the meantime, in order to cope with this situation, Islamic banking institutions (IBIs) require more positions to be filled, currently needing a 200,000 workforce by 2020. However, to date only a 17,621 workforce are available in the IBIs which constitutes 11% of that required. This connection has dragged IBIs to the different dimension of issues that is talent shortage. The effect of the problem has made many Islamic banking education and knowledge service providers (IBEKSP) offer an Islamic banking programme in order to confront the situation. Despite Malaysian IBESKP producing abundant graduates nowadays in the job market, Malaysian IBIs still address the issue that they face a critical shortage of talent. Therefore this article attempts to propose a specific talent development model for Malaysian Islamic banking graduates. These data were evaluated by a group of Malaysian undergraduates regarding talent development current practice in university. This study used a structural equation modelling method and it was found that the proposed variables of the study have a positive impact on talent development.

Subjects: Banking; Environmental Studies & Management; Multivariate Statistics; Sociology of Work & Industry; Statistics for Business, Finance & Economics

Keywords: talent development; Islamic banking; undergraduate; Malaysia

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The authors have seven years of experience in banking institutions dealing with the workforce in the banking sector.

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PUBLIC INTEREST STATEMENT

An astonishing track record in Islamic banking has made Malaysia one of the six at the core of world Islamic banking leaders. The growth development of Islamic banking has increased demand for Islamic banking professional talent among Malaysian Islamic banking institutions (IBIs). This phenomenon has created a talent shortage of 82% and affects all 25 Malaysian IBIs. This article describes some of the talent development effects of the talent shortage. The importance of a strong teaching pipeline as the catalytic factor in talent development was found, whereby talent and curriculum also increase by a significant number. Overall, talent development has a profound effect on the talent shortage, and therefore a holistic approach of talent development that combines talent, university infrastructure, and curriculum can help to overcome an issue in the future.

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1. Introduction

For the last decade, Islamic banking growth has taken place aggressively on an unprecedented global scale with its influence now reaching into the very mainstream of the wider conventional finance industry. The maturation and changes occur not only in the organisation itself but also in the whole banking system, including product development, customer base, legal, policies, compliance, workforce, and new endowment. According to, the global Islamic banking assets witnessed a compounded annual growth rate of around 17% from 2009 to 2013. Apart from that, Islamic banking assets in six core markets—Qatar, Malaysia, Indonesia, Saudi Arabia, UAE, and Turkey—are on course to touch US$1.8 trillion by 2019. According to Farouq Alwyni, chairman for Islamic studies in finance, economics, and development, Indonesia, Islamic banking nowadays has been performed in 82 countries around the world including non-Muslim majority countries (Farouq, 2015).

The growing momentum of the Islamic banking sector has created a significant portion of the 200,000 workforce to be required by the Islamic banking Institutions (IBIs) by 2020, which comprises various Islamic finance professionals (Malaysian International Islamic Financial Centre, 2013). Through the Economic Transformation Programme (ETP), student enrolment in Islamic finance is aimed at 54,000 by 2020 from the current 6,000. The Programme also targeted increasing the number of employable Islamic banking graduates from 64.8% to 80% by 2015 (ETP, 2014). However, nowadays there is only a 17,621 workforce in IBIs, constituting 11% of that required by Bank Negara Malaysia.

Although the amount of talent required in the IBIs is increasing and the number of student enrolment has increased, the Asian Institute of Finance stated that the talent shortage in IBIs currently constitutes 82%. Meanwhile a collaboration survey conducted by the Finance Accreditation Agency and Islamic Finance News has identified three sectors in most critical condition for talent development: Shariah expertise, Islamic finance, and knowledge and product innovation (Finance Accreditation Agency, 2014). On the other hand, many IBI leaders raise the issue that they hardly find the talent meets with their standards. Why is this so? Do Malaysian public universities not provide qualified talent that meets with IBI preferences? Well-equipped talent is critically needed by IBIs to cope with the fast growth of the institutions.

This article therefore aims to achieve three objectives: first is to determine the most dominant factor affecting talent development in IBIs. Second is to see the positive relationship from each variable of talent, university infrastructure, and curriculum toward talent development. Third is to develop a talent development model that could build qualified talent into IBIs.

2. Literature reviews

In the response towards the talent shortage in IBIs, there are four variables discussed in this article: talent development, talent, university infrastructure, and curriculum. A frequent mismatch between talent supply and demand mentioned by many practitioners has brought talent development as a central issue (Amat Taap, 2014). As a result, many practitioners faced an issue to hire new talent that meets with their need and preferences (ManpowerGroup, 2013). Hence a set of talent development activities that comprise talent, university infrastructure, and curriculum are the essential pillars for qualified talent in the organisation (Gagne, 2003). Moreover, the basis for development of qualified talent importantly is from the supply of talent itself; that is, higher education institutions.

2.1. Talent development

According to Gagne (2007) talent development has demonstrated ability in any domain that is a process of development which has to be fostered to enable any particular talent at maximum level. Although the talent development derived by Gagne (2003) can be through formal and informal training, Amat Taap (2014) urged that qualified talent taken into an organisation should undergo formal training and practice to cope with changes of the current workplace environment in terms of challenges and obstacles. Hence the need for formal talent development conducted in the higher education institution is an essential factor to provide qualified talent. Moreover, studies by Gagne

(1998, 2003, 2005, 2007), Renzulli (1994), Kemple, Herlihy, and Smith (2005), Amat Taap (2014), and Marimuthu (2015) are strongly related towards talent development among students. Meanwhile Renzulli and Reis (1998) pointed out that talent development should consist of curriculum which could equip and educate talent with essential knowledge. Supported studies by VanTassel-Baska (1994), Colangelo, Assouline, and Gross (2004), Amat Taap (2014), and Syed Othman (2013) have revealed the curriculum is a vital variable in talent development. There some arguments that the process of talent development could not be completed without the environmental factor as a catalyst. In the same vein, Uline and Tschannen-Moran's (2008) study findings are that the quality of school facilities positively impacts student achievement. Several studies have revealed that it is not just Gagne's (2005) finding that acts on the environment as a catalyst of talent development (Amat Taap, 2014; Andrews & Powell, 2009; Earthman, 2002; Elliott & Healy, 2001; Gow, 1999; Henderson & Mapp, 2002). The studies presented thus far provide evidence that the talent development component should stand by the three vital pillars of talent, university infrastructure, and curriculum to be able to develop well-rounded talent. In view of all that has been so far mentioned, one may suppose a Differentiated Model of Giftedness and Talent (DMGT) theory model to be used in this study. A DMGT is employed since it is the most comprehensive representation of the complexity of the talent development process (Baird, Furukawa, & Raghu, 2012; Cobley & McKenna, 2011; Gagne, 2000, 2004; Quek, 2005; Walton, 2014).

2.2. Talent

According to Balkundi and Kilduff (2006) the definition of talent has a tendency to be particular to an organisation and very influenced by the method of the work attempted. Meanwhile, Morton (2004) pointed out that an individual who has a good natural ability at any particular activity can be defined as a talent. Smart (2005) urged that a talent is a player who is in the top 10% of talent available at all salary levels, the best of class. Comparing with Amat Taap (2014), there are two types of talent: general skill, with five critical functional learning skills (personal skill, people skill, ethics and values, management and leadership, and teamwork); and technical talent that needs a special skill and specific knowledge. The importance of talent is the subject of the discussion because of the complexity of developing a talent. Talent nowadays has become more complex in terms of demographic changes including the workplace environment that requires comprehensive and up-to-date skills and ability. Hence, based on the discussion earlier, talent can be defined as two types of talent: first is new talent which consists of raw talent. Second is existing or trained talent, encompassing experienced talent that wants to upgrade their current level to the next level. Overall, defined talent is crucial to be developed for the future talent supply.

2.3. University infrastructure

Tertiary education nowadays has become more commercially oriented with many co-joined activities organised between universities and industry. The collaboration activity usually holds around skills development that would meet with the industry's needs and preferences. Therefore to produce a talent that suits the industry needs and preferences, a comprehensive and conducive infrastructure becomes essential. Tertiary education is required to provide the mentioned facilities in order to produce the talent desired by the industries. However, Gow (1999) indicated that the greatest obstacle to keeping pace with the changing demand of education towards university infrastructure is the population increment. As well as the seasoned infrastructures, those today could not cope with the teaching and learning requirement and methodologies. Meanwhile Andrews and Powell (2009) pointed out that an effective interactive space in the universities' infrastructures could give an extra credit to changes of the teaching and learning practice towards an academic community in any particular university. Earthman (2002) estimated a difference of between 5 and 17 percentile points in the achievement of student study in a modern building compared with student study in a seasoned building. This significantly emphasises the vital point of the design features, which contribute to attracting and increasing the social stability environment of the school (Uline & Tschannen-Moran, 2008). Elliott and Healy (2001) found that the factor of students' educational experience is most important in

influencing student satisfaction. Furthermore, according to McLaughlin and Faulkner's (2012) study, the students indicate that usually universities provide a mismatch in needs infrastructures to the students because the students nowadays are parallel with the development changes of new technologies and commercial-oriented value. Nevertheless, Amat Taap's (2014) study showed that it is important to have frequent collaboration between universities and industries. Thereby, regarding the earlier discussion, the university plays a vital role in providing a competitive graduate by having a comprehensive and conducive facility. Exploration of university infrastructure as the point of the discussion would contribute to the holistic approach of talent development for a career in the IBIs.

2.4. Curriculum

The primary objective of education is to equip the student with competencies for them to have a professional and successful life (Mcvay, Murphy, & Wook Yoon, 2008). Hence, there is a frequent issue arising between tertiary education and industries in terms of curriculum from a theoretical and practical base. The content of the curriculum provided could not cope up with the industries' changes, resulting in the students learning outdated curriculum. In this manner, the curriculum becomes one of the base talent development pillars. The curriculum programme content provides the student with a basic theoretical framework obligatory for comprehension business management administration. In the meantime, it furnishes students with information and procedures that are crucial to start up and manage their own small business effectively (Venter, 2001). Quality in higher education has received critical consideration over previous years about the practicability of curriculum. Numerous contributions proposing how quality ought to classify and measure within an educational (Finnie & Usher, 2005). However, issues remain over how appropriate the university is to prepare the student for facing a continuously evolving workplace in industries (Rubin & Dierdorff, 2009). The link between education, training, intent, and actual career choice to start up a business is a complex process and remains under-investigated (Nabi & Holden, 2008).

According to Tay Kay Luan (2013), pointed curriculum should be technologically driven and based on e-learning and mobile learning, and should include ethics in any education system. Industry standards should be looked at from a global viewpoint. Supported by Syed Othman (2013), the education programme should be a very comprehensive programme with high-quality curriculum and content essential to produce the talents needed in any field. Nevertheless, Amat Taap (2014) revealed that an education programme should have an accreditation to be recognised in industry. In conclusion, curriculum programme conduct and content should have a high quality, standardisation, and accreditation. This is to ensure the graduate or student will be recognised among industries locally and internationally.

3. Analysis of the literature reviews

Based on discussion earlier in the literature, most of the literature findings focused on pedagogy and adolescent study instead of undergraduate study. The undergraduate is the underpinning factor to create qualified talent in a job market, as well as the exploration of the dimension of talent development that meets with the IBIs. However, to catalyse the undergraduate to be a qualified talent in a job market, there are four variables that need to be focused on in providing a talent that qualifies for IBIs: talent, university infrastructure, curriculum as an independent variable, and talent development as a dependent variable. Overall, these predicted antecedents' hopes can develop and propose the "Talent Development Model Career for IBIs" by adopting a DMGT model.

4. Methodology

4.1. Research design

The main purpose of this article is to answer whether talent, university infrastructure, and curriculum are predicting antecedents towards talent development in the Malaysian Islamic banking sector. For that purpose, the article is divided into two phases. In the first phase, the objective focus is to identify factors involved in talent development in IBIs. Indeed, this phase is a theoretical approach. In the second phase, the objective of the article is to determine the most dominant factor affecting talent development in IBIs. This second phase of the article uses an empirical approach. Therefore, this article has its own two characteristics that are explorative and descriptive. Thus, to achieve the overall objectives of the article, theoretical study and empirical study are conducted phase by phase and sequentially.

4.2. Sampling

There are two categories of sampling in this article: Islamic banking undergraduates (questionnaire respondents), and Malaysian public universities. The Islamic banking undergraduates were enrolled in a bachelor's degree related to the Islamic banking programme offered by Malaysian public universities. The undergraduates were selected from the fourth and fifth semesters due to their study subject of Islamic banking focus. The sampling technique used in this category is systematic sampling because it is a probability sampling that suits structural equation modelling (SEM) analysis and can avoid bias (Kya, Ngor, & Awang, 2012; Zikmund, Babin, Carr, & Griffin, 2012). From a total population of 2,507 undergraduates, only 335 respondents were selected as suggested by Krejcie and Morgan's table to determine sample size because it is easy to use, practical, and also easy to refer to and has been used by many previous researchers (Moon, Brighton, & Callahan, 2003; Reid, 1992; Renzulli, 1992).

The second category was Malaysian public universities. According to Malaysia Quality Accreditation there are seven Institute Tinggi Pengajian Awam or Public Higher Learning Institutions (IPTAs) offering a bachelor's degree related to the Islamic banking programme: University of Technology MARA (UITM), Universiti Sultan Zainal Abidin (UniSZA), University of Utara Malaysia (UUM), International Islamic University Malaysia (IIUM), University of Malaysia Sabah (UMS), University of Science Malaysia (USM), and University of Malaysia Kelantan (UMK). For this category, cluster sampling was used because it is easy and convenient to apply. There are four categories to segregate: North Zone (UUM & USM), South Zone (UMS & IIUM), East Zone (UniSZA & UMK), and West Zone (UITM) (Kemple et al., 2005; Renzulli, 1994; Riehl & Sipple, 1996).

4.3. Data collection method

There are two types of data collection methods involved in this research. First is library research, and second is a questionnaire. The first stage of the data collection method involves library research by extensively reviewing the literature. The objective of this stage is to have a general idea of the research and the reality issue of talent development in IBIs, and also to identify the relevant factors towards talent development.

The second phase is to develop the questionnaire survey instrument. The questionnaire was divided into five sections (A, B, C, D, and E). Each section represents a variable: A for demographic (seven items), B for talent development (eight items), C for talent (seven items), D for university infrastructure (six items), and E for curriculum (six items). Each question was measured by a 10-point Likert-scale technique (Cummins & Gullone, 2000; Dawes, 2008; Hair, Hult, Ringle, & Sarstedt, 2013; Norman, 2010). Each scale measured the result by examining how strongly subjects agree or strongly disagree with the statement on a 10-point scale. It not only ranks the result but also measures the rank and ensures the accuracy and sensitivity of data.

This questionnaire was partly taken from previous research studies, and the items used in the questionnaire were adopted from several existing questionnaires. The demographic item of the

questionnaire was partly taken from "Human Capital Development with Competitive Advantage for UITM Undergraduates in Banking Industries" (Aziz & Wahab, 2014). The talent development was partly taken from "A National Study of Scientific Talent Development in Singapore" (Quek, 2005) and "Study on Talent and Skills Requirements for the Banking Sector in Malaysia". The complete questionnaires were tested with the reliability and validity test using Cronbach's alpha and the expert to make sure the questionnaire was reliable to use.

4.4. Data analysis

The quantitative method research data were analysed using the Analysis of Moments Structures (AMOS version 21.0). The study employed SPSS for analysing descriptives of the respondents and the response score of the measuring items. SPSS was also employed to run exploratory factor analysis to perform an exploratory analysis to reduce and manage the number of many variables that belong together and have overlapping measurement characteristic. Meanwhile, AMOS software was used to handle the confirmatory factor analysis (CFA) to validate the measurement model of a construct and to test the stated hypothesis in the path model. The statistical method employed in testing the path model was SEM. SEM is a second-generation method of statistical analysis developed to cater for limitations in the traditional ordinary least square regression especially when dealing with latent constructs in a model (Reis, Schader, Milne, & Stephens, 2003; Renzulli & Reis, 1998; VanTassel-Baska & Brown, 2007).

5. Implications of the study

The implications of this article can be seen through two aspects, that is theory and practice aspects. From the theory angle, this research focuses on the exploration factors of talent development for IBIs among undergraduates in public universities. Further, it can be extended to be applied to the Islamic banking industry in Malaysia towards existing talent. Apart from this, the article also can be extended by future research towards an Islamic approach for talent development in Islamic banking.

From the practice angle, this research consists of five elements of the practices dimension. Firstly, it encourages the exact criteria needs for undergraduates of Islamic banking to fulfil a talent in IBIs. Then, to identify a programme of talent development conduct in Malaysian universities. Second, the research gives a proper guideline for undergraduates and universities in developing the needs of IBIs. Third, it could give a clear picture for undergraduates of the Islamic banking programme to see reality happen in talent development in IBIs. Fourth, it hopes to help the curriculum programme maker for public universities of the Islamic banking programme to enhance a programme that suits the current scope of IBI practice. Lastly, it could channel the information to the IBIs so that they could collaborate with universities in developing a competitive undergraduate to be prepared for the Islamic banking world.

6. Measurement model

First, we developed a latent construct for talent, curriculum, university infrastructure, and talent development to assess the fitness level of the measurement model involved so that the quality of the model could be improved, eventually testing the relationship between independent and dependent constructs (Afthanorhan & Ahmad, 2014; Bentler, 1990; Bollen & Pearl, 2013; Zainudin, 2015). To do so, the fitness level can be improved by deleting items that carry lower factor loading. There are many rules of thumb to consider in the deletion of items when performing CFA such as 0.40, 0.50, and 0.60 factor loadings. In this study, we retain items beyond the threshold level of 0.60 of factor loadings as counselled in a previous study (Hair, Black, Babin, & Anderson, 2010; Lowry & Gaskin, 2014; Zainudin, 2015). Generally, the lower factor loading can impair the assessment of convergent validity such as average variance extracted (AVE) because the lower factor loading will capture lower variance that is explained by the respective latent constructs (Fornell & Bookstein, 1982; Fornell & Larcker, 1981; Hair et al., 2013; Zainudin, 2015).

Initially, the total number of items in our model was 45 items before executing the CFA procedure. After specifying the measurement model in order to ensure the model achieved the fitness level,

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Table 1. Convergent and discriminant validity						
Construct	**AVE**	**CR**	**Talent**	**Curriculum**	**University infrastructure**	**Talent development**
Talent	0.54472	0.858	**0.7400**			
Curriculum	0.6474	0.902	0.6253	**0.8046**		
University infrastructure	0.7003	0.933	0.4576	0.5763	**0.8367**	
Talent development	0.6472	0.902	0.3625	0.3621	0.5124	**0.8045**

Note: The significance for bold values "the compare value of variables".

only 21 items (46.66%) were retained. Beforehand, we attempt to explain the goodness of fit of the overall CFA models. For models with good fit, chi-square normalised by degrees of freedom (Chisq/df) should be less than 5.0 (Bentler, 1990; Bhattacherjee, 2001), Comparative Fit Index (CFI), Goodness Fit Index (GFI), Tucker-Lewis Index (TLI), and Normal Fit Index (NFI) should all be greater than 0.90 (Anderson & Gerbing, 1988; Zainudin, 2015), and RootMean Square of Error Approximation (RMSEA) should be less than 0.08 (Cunningham, Preacher, & Banaji, 2001; Hooper, Coughlan, & Mullen, 2008). For the current model, we achieved all the requirement indices (Chisq/df = 3.067; RMSEA = 0.054; CFI = 0.955; GFI = 0.925; TLI = 0.947; NFI = 0.935) and concluded it appropriate for the next step. Further, we quantified the reliability and validity test through composite reliability (CR > 0.70; Nunally & Bernstein, 1994), AVE > 0.50 (Fornell & Larcker, 1981) and discriminant validity (square root AVE must exceed every construct correlation) as exhibited in Table 1. Later, the path analysis will be undertaken to test the relationship of independent and dependent constructs as discussed in the aforementioned research hypotheses.

7. Structural model

The three hypotheses were tested simultaneously using SEM as performed in AMOS 21.0. This approach is particularly appropriate for a confirmatory approach which means the model proposed generally has higher levels of evidence in terms of the latent constructs involved in a causal model. Basically, SEM exemplified in AMOS entails a sufficient sample size as 200 samples (Bagozzi & Yi, 1988; Hooper et al., 2008; MacCallum, Browne, & Sugawara, 1996) and depends on strict assumptions such as normality, homoscedasticity, and free of outliers to obtain the proper solution and avoid non-convergence estimates (Anderson & Gerbing, 1988; Hoyle, 1995). In this present study, we already meet this requirement so the path estimates obtained through the maximum likelihood technique were trustworthy. Figure 1 shows that the three main exogenous constructs (talent, university infrastructure, and curriculum) are imposed on the endogenous construct (talent development). In particular, every exogenous construct contains sub-constructs that are being used to measure the respecting main construct where talent (employability and technical skills) and curriculum (practicability and MQA requirement) have two sub-constructs respectively and university infrastructure (environment, technology, experience lecturer) contains three sub-constructs. All constructs were modelled as a reflective measure. To test the construct relationship, the single arrow is chosen to represent a causal effect; that is, this must begin from the exogenous construct to the endogenous construct (Arbuckle, 1995).

Next, the path estimates of each hypothesised relationship in the causal model and the square multiple correlation (R^2) of the dependent construct were examined as reported in AMOS 21.0. Hypotheses 1, 2, and 3 examine the effects between university infrastructure, curriculum, talent, and talent development. The results revealed that university infrastructure (β = 1.046, CR = 5.937), curriculum (β = 0.639, CR = 2.211), and talent (β = 0.576, CR = 4.114) were statistically significant to talent development. With respect to the statistically significant, we use the critical ratio (CR) as our guideline to determine the research hypotheses. Basically, the CR must exceed 1.96 to indicate significant probability (rejecting the null hypotheses). Plus, it was found that all path estimates had a

Figure 1. Talent development structural model.
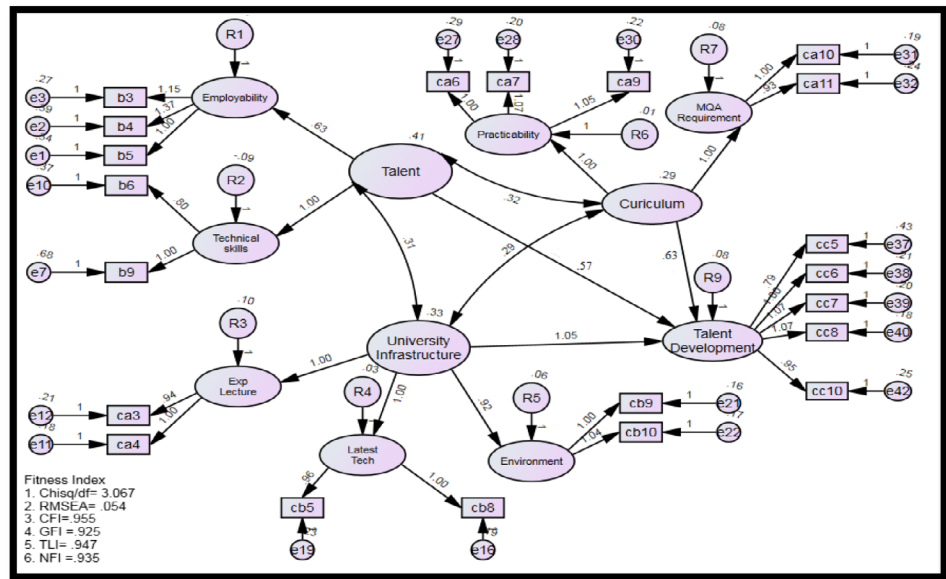
positive effect on talent development: when university infrastructure, curriculum and talent go up by 1 unit, the talent development goes up by 1.046 units of university infrastructure, 0.639 units of curriculum, and 0.576 units of talent. Then it was found that the proposed model explained a highly significant percentage of the variance in talent development (74.1%). Cohen (1988) contends that R^2 exceeding 26% is considered to have a large effect in a causal model. Therefore, a model that involved measuring the level of talent development is sufficient and meaningful since it contributes a high impact to the research on talent development. In addition, we supported hypotheses 1, 2, and 3 as reported by the SEM approach.

8. Conclusion

From the theoretical standpoint and theory building, this study has contributed towards the work on talent development among Islamic banking graduates. This study attempt to find the most dominant factor affecting talent development that can facilitate the relevant stakeholders of the study, improving their understanding and information. It is observed that the university infrastructure with experienced lecturers, new technology, and a conducive environment is essential for the delivery of better quality talent development in IBIs.

In summary, universities have the responsibility of providing learning conditions that hold and support the graduate talent development programme. The university should provide a lecturer with adequate experience relevant to the current practice. Furthermore, the university also needs to cope with the current technology changes because nowadays graduates become more advanced users in utilising technology. Nevertheless, providing a conducive environment for study, such as a library, an interactive room, and so on, can improve student study performance compared with an adverse environment with poor facilities.

This article of study set out to identify, examine, and build a talent development model for a career in Malaysian IBIs. Given the objective of the study, three limitations have been identified that provide the extent of opportunities for future research in this scope study. First, the respondents of the sampling used in this study were limited to Islamic banking undergraduates. Second was the limitation of the talent development construct to the Malaysian public universities dimension. Third, the last limitation of this study is that the 335 sample size is relatively suitable from statistical viewpoints but should be extended to a larger sample size for solid generalisation of the findings of the study.

On the contrary, the extent of future study could be seen from the viewpoint of different unit analyses that may consist of untapped talent, especially female talent, because this untapped talent remains in the research. Apart from that, government support in terms of talent development can be also seen as a new exploration of the research study that may contradict the findings of this research.

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