

Models/Concepts

Studying the Alignment between University Education and Labour Market Needs: Focusing on Technology Graduates' Employability in Sri Lanka

Adikaram, K.K.N.B.^{1*}, Rajawatta, K.M.W.² & Kumari, K.G.P.³

Department of Multidisciplinary Studies^{1,3}, Department of Bio-Systems Technology²

Faculty of Technology, University of Ruhuna, Sri Lanka

***Corresponding author:** nilanthi@fot.ruh.ac.lk

Abstract

The employment market is evolving and offers graduates opportunities, yet poses challenges as well. To operate any job market efficiently, satisfying job providers and job seekers are essential. It will be mostly determined by the suitability of employment in terms of both the quality of the candidate and the work position's requirements. This concept paper outlines how the planned study examines the employment suitability of graduates with an emphasis on Sri Lanka technology graduates. The case study approaches will be followed using the technology graduates of the University of Ruhuna, Sri Lanka by assessing the theoretical framework of expectancy theory. The findings offer significant insights into the opportunities and challenges that are faced by the technology graduates. The findings of the study aim to understand the demand for technology graduates in the job market and necessary skills to be acquired by technology graduates. Difficulties that Sri Lankan policymakers and educators experience in matching technology education with labour market demands are highlighted in this study. The recommendations provided in this study aim to bridge the gap that exists between market demands and academic standards. Future research need to address the limitation of this study focusing on a single university and faculty by gathering data from other universities in various fields of study.

Keywords: *Employment, Graduates, Policymakers, Technology*

Introduction

Even though there has been prodigious growth in tertiary education over the last decades, most graduates are struggling to find a good job in which the employers are expecting -quality and qualified employees. The relationship between higher education and labour market requirements is quite problematic since both expect a win-win situation based on their skills and requirements. However, the employment landscape for technology graduates is situated at an exciting nexus of innovation and opportunity in an era characterized by fast technological improvement (Chaibate et al., 2019; Lynch & Osterman, 1989; Oliver & Jorre, 2018). Therefore, graduates in technological professions are leading the way in this digital frontier as they have the knowledge and abilities necessary to shape the future. Introducing new curricula to the education system meet timely requirements of the job market in any country (Wong et al., 2014). The impact and the input generated from such efforts will be significant in developing nations (Ariyawansa, 2008). Universities, among other institutions, play a significant role in producing the workforce to the economy needs. However, it believes there is a disparity between the supply and demand of qualified workers among Sri Lankan graduates (Ariyawansa, 2008; Gunawardena, 1993). Hence undertaking a relevant curriculum is an essential requirement of those universities.

Accordingly, the Sri Lankan government included Technology Studies in the Advanced Level Stream to admit qualified students to the university system. To date, the university system has produced over 2000 technology graduates to the country's workforce. However, a widespread issue in Sri Lanka is the skill gap among graduates, where the graduates' skill levels and the skill levels recognized and demanded by employers do not match when the graduates enter the corporate sector. Particularly in technology-related subjects, the education environment has been greatly impacted by the quick development of technology. With an emphasis on insights from Sri Lanka, this study seeks to evaluate the employability of technology graduates.

Therefore, it is important to assess both their employment relevance and employment potential. Additionally, it is unclear if these graduates are equipped to meet the complex and diverse needs of the contemporary work environment. Moreover, recent graduates including technology graduates typically confront a wide range of opportunities and challenges when they begin their employment especially due to prevailing economic crisis and political instability. This in-depth investigation is carried out to ascertain to what extent Sri Lankan universities meet the requirements of the technology job market. The issue is determining whether the technology graduates generated by Sri Lanka's university system are sufficiently prepared to satisfy the demands of the modern workplace, as well as their job relevance and potential.

Literature Review

This study aimed to combine higher education, technology education, quality graduates and technology graduates employment in Sri Lanka. These will be evaluated based on key elements of expectancy theory namely expectancy (performance will improve with further effort), instrumentality (enhanced performance is attained, a certain consequence will occur) and valence (the expected value or significance of a result).

Higher Education

University education is regarded as the core of higher education in Sri Lanka and has a greater impact on producing employees for the economy (Ariyawansa, 2008). Other than producing quality graduates that meet the labour market demand, these students have greater chances to learn while working as permanent or temporary employees. Hence, higher education is different from secondary education which enables students with sufficient knowledge and skills (instrumentality) that are easily transferable to the workplace (Chillas, 2010). The scholars highlighted the mismatch between degrees and job prospects, particularly for graduates in the Social Sciences and Humanities (Ariyawansa, 2008). Hence, these students have low expectations of their motivation to pursue relevant jobs described as the theory of expectancy. According to overseas studies, there is a higher rate of employment among undergraduates from other nations. The educational environment in Sri Lanka is distinct from that in a few other international nations since giving high valence for degrees confirms the high perceived value for higher education.

Technology Education

Technology education has been identified as crucial in modern curriculum, irrespective of the level of students in primary, secondary or higher education. Studies were conducted on technology education in countries particularly developed nations and countries famous for using high technology (Weng & Li, 2018). According to Weng and Li (2018) there are positive outcomes on the development of technology education as well as many challenges for technology education in early childhood in the Chinese education system.

In Sri Lanka, technology education is considered as a pivotal aspect of higher education to cope with global markets covered with technological advancements. Hence, the Sri Lankan government has introduced a technology stream to admit qualified students to the university system who align with technological advancements.

Moreover, the theory of expectancy provides a valuable and meaningful framework for motivating graduates to match their skills with the labour market requirements. As depicted by the expectancy component in expectancy theory, the belief of an individual may lead to achieving the desired performance level (Donnelly & Gamsu, 2019). Therefore, the component of expectancy is also vital for technology graduates concerning their beliefs. They will be more engaged in their studies if they believe that their degree in technology will lead to successful training. Hence, this can be implemented through industrial training, curriculum revisions, and practical training that closely matches labour market requirements. Besides, the component of instrumentality reveals that the perception of skills and qualifications that they gained through their degree will directly relate to employment opportunities and employers may think technology graduates have enough skills to enhance their survival in the organisation (Berggren, 2010). Further, the value associated with anticipated results also directly affects the balance of labour market requirements and graduate expectations. For instance, the success of prior graduates, employment trends, and demand for technology graduates influence how people value technology degrees.

Quality Graduates

Producing quality graduates is a key responsibility of a university. Jackson (2016) discussed the role of universities in providing quality educational experiences for undergraduates and they believe they can achieve better performance as a result of quality education from universities which relates to the theory of expectancy. Moreover, universities may tailor their degree programs to labour market needs by motivating undergraduates to focus on successful employment (Pradela, 2015). Notwithstanding, the quality of school education including primary and secondary education is growing steadily in developing countries parallelly with economic growth and income. Hence, the quality of higher education is highly imperative to overcome the mismatch between qualified graduates and labour market requirements by shaping quality (Boccanfuso et al., 2015). Students and their families also place more weight on potential benefits from higher education when they believe the quality of higher education compared with the early stages of their educational life.

Graduate Employment

According to Sudarshana (2015), undergraduates generally had poor employment rates and preferred jobs in the private sector. One of the main reasons for that is career decisions of graduates are mainly influenced by the value assignment for certain occupations. Therefore, graduates from Sri Lanka have a strong preference for careers in the private sector indicating a high value for jobs in the private sector as confirmed by the expectancy theory. A significant barrier to meeting employment objectives was recognized as language proficiency, particularly in English which leads to lower job expectancy

among undergraduates. Both undergraduates and graduates may become less motivated during their educational journey if they think these language barriers will make it difficult to get better employment (Ciriaci & Muscio, 2014). According to Chandrasiri (2008), graduate unemployment is a structural issue that necessitates both supply-side and demand-side remedies revealing the low instrumentality of graduates as they think their qualifications are not suited to industry requirements. Economic expansion and government support are required on the demand side, but colleges should produce graduate output that is more market-oriented on the supply side.

Although the topic has been extensively studied in developed nations (Lynch & Osterman, 1989, Oliver & Jorre, 2018) there are limited studies that could be found on the subject in developing nations (Kassal, 2021). More importantly, it is hard to find in-depth research available in developing countries. This study is distinctive since it was carried out at the beginning of the introduction of a new course curriculum to the university system. Hence the finding may be timelier, relevant and essential to making decisions on measuring the effectiveness of the implemented educational reforms.

Methodology

According to Black (1994), qualitative research is better suitable for comprehending the nature, advantages, and interactions of factors. Hence, this study used the qualitative research approach as the objective is to investigate the research problem in depth. To gather relevant data, unstructured, open-ended face-to-face interviews were conducted. The sample for this study could be purposefully selected, and interviews will be done with two main parties, namely the employment organisations where the graduated students are working and the technology students who graduated and are currently employed. It would be advantageous to have access to the appropriate participants through the professional contacts that researchers as university lecturers may provide. Additionally, a pilot study was conducted to determine the study's viability (Kim, 2011). Prior to data collection, key informants will be contacted in order to gain a deeper understanding of the field of study.

Sinhala is the mother tongue of the participants; thus, the interviews were conducted in Sinhala. Interviews were captured on audio. Following verbatim transcription, the interviews could be translated. Considering the qualitative nature of the data, a thematic analysis was conducted to find pertinent topics (Braun et al., 2012).

Discussion and Conclusion

Universities must play a significant role in producing skilled and talented professionals for the country among the many educational institutions operating within. Exploring the employment appropriateness of graduates from national universities will therefore be the main focus of this study. Since the study

considered two aspects of matching the job suitability of graduates, from employers and employees aspects, the findings could assist in identifying each party's expectations, obstacles, and the mismatching of requirements, if any. Therefore, this exploration may prompt researchers to investigate effective strategies for university-industry collaboration in the technology sector.

This study may contribute to the limited literature on qualitative studies of job market analysis in developing nations. The findings might help job providers and job seekers to understand each other's expectations, which would help them to meet one another's needs. The policymakers would be directed to establish appropriate standards and assign relevant rules and regulations for the ultimate benefit of society.

In conclusion, there is a need for a more all-encompassing strategy to educate technology graduates, emphasising not only hard capabilities but also soft skills and information particular to the business. The study also underlines the value of industry-academic partnerships and internships in bridging the employment-education gap. By resolving these problems and putting the study's suggestions into practice, stakeholders in Sri Lanka may better prepare graduates in technology to fulfil the demands of the nation's dynamic job market and greatly advance the country's economic growth and development.

Future studies may overcome the fundamental limitation of qualitative studies, which is the inability to generalise the findings, by utilising additional research methodologies, such as quantitative and mixed methods. The finding may direct both employees and employers to find and fulfil their requirements. The university student in particular may be knowledgeable about what employers want. They might therefore be more concerned with having the qualifications necessary to meet market demand. In addition, the employers would be aware of what their workers expected from them and would accommodate them accordingly.

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