# A PRELIMINARY STUDY ON MALAYSIAN POLYTECHNICS STUDENTS' ACADEMIC CREDENTIALS AND ITS RELATIONSHIP TO EDUCATION CHOICE ON TVET

# Foo Jyy Wei

Politeknik Kuala Terengganu, Jalan Sultan Ismail, 20200 Kuala Terengganu, Terengganu, Malaysia Corresponding Author. Email:jyywei@hotmail.com

## Hazri Jamil

Institut Penyelidikan Pendidikan Tinggi Negara (IPPTN) USM, 11800 USM, Pulau Pinang, Malaysia

## Nordin Abd Razak

School of Educational Studies, Universiti Sains Malaysia, 11800 USM, Pulau Pinang, Malaysia

# **ABSTRACT**

The purpose of this paper is to provide information and in depth comprehension related to the research findings on the education choice on TVET among Malaysian polytechnics' students in terms of program enrolled and its academic credentials. The academic credentials studied consist of two variables which are the availability of the desired program and employment opportunities. There are 47 students from a Malaysian polytechnic were participated in this study. The study employed a self administered questionnaire measuring the mentioned variables. Descriptive test and rank biserial correlation were conducted on the data analysis. Results suggest that there is a weak association between the education choice in terms of program enrolled and academic credentials in terms of the availability of desired program among Malaysian polytechnics' students. On the other hand, the results also suggest that there is no association between the education choice in term of program enrolled and academic credentials in terms of employment opportunities. Future research suggested to be carried out is on exploring the other academic credentials' variables on education choice on TVET among Malaysian polytechnics students.

**KEY WORDS:** Education Choice, Academic Credentials, Malaysian Polytechnics, Technical and Vocational Education Training (TVET)

## 1. INTRODUCTION

The association among education, qualification and development was mentioned by Ronald Dore in 1976. According to Dore (1976), the diploma disease is a normal process of obtaining academic credential. In developing countries, the consequences of diploma disease were considered to be especially dishonourable. Those processes are result from modern bureaucratic organisations that emphasise academic credential in hiring employees, especially in general education subjects. Hence, the value of the academic credential depends on how many other people have it. One consequence of this is academic credential escalation, a rise in the academic credential needed for a particular job (Pelletier, 1996).

It is also a norm now that employees are over qualified in term of academic credential for their occupations. Degree holders are working as administration clerks or even sales representatives. Diploma holders are working as promoters in the shopping complex. As the average educational attainment of the labour force rise, there is an indication that the job structure has not been able to absorb the increased supply of educated workers into their traditional occupational structure, and over education phenomena has emerged in the labour market (Tsang & Levin, 1985). Over education has been commonly defined in one of three ways: as a decline in the economic position of educated individuals relative to historically higher levels: as under fulfilled expectation of the educated with respect to their occupational attainments: or as the possession by workers of greater educational skills than their jobs require (Rumberger, 1981). One of the measures suggested by Dore (1976) to overcome this phenomena is by transforming post secondary education institutions into in career learning in special educational institutions (TVET).

When stating the qualifications considered as the most important in assessment and recruitment of employees, higher educational attainment got the fifth rank, below professional experience or job specific skills (Mazovian Centre for Regional Survey, 2013). Therefore education is not a sufficient asset to get a job; the employers put more weight on the actual or potential skills of the candidates. The level of education attained

becomes less important than the field of studies and the profession learnt and their fit to the needs of the local labour market.

The problem of unemployment among graduates stems from over production, resulting from the lack of fit between the structures of supply and demand of the particular fields of studies (Mazovian Centre for Regional Survey, 2013). Subsequently, the educated unemployment will lead to education inflation.

It is vital to introduce changes in the fields and programs of studies offered by post secondary education institutions. Limiting the number of student enrolment in the particular fields of studies, in which there are over production, and expanding the number of student recruitment in the fields in which there are shortage in the labour market would also counter the risks of education inflation (Mazovian Centre for Regional Survey, 2013). In 2008, the Ministry of Human Resources reported a labour shortage of over 700,000 skilled workers in the manufacturing, agriculture and construction industries. It is predicted that demands for vocational skills will continue to rise. This is due to the expected 3.3 million jobs that will be created under the National Key Economic Areas (NKEA) by 2020 where 46% of these jobs will require vocational certificates or diplomas (Companies Commission of Malaysia, 2013). It is the purpose of this study to provide enlightenment on the education choice of TVET students in terms of program enrolled and its academic credentials.

## 2. BACKGROUND OF STUDY

According to Dore (1976), distressed longing for modern sector occupations by the students in third world countries has misrepresent the education in those countries. As consequences, quick growth of education occurred just to fulfil the educational credentials of the students, and higher credentials have become the priority in obtaining the occupations. Dore also pointed out that the final outcomes could also be severe. Reputation of schools and teachers' career are increasingly depending upon their students' success in the examinations. For students, years have been spent in learning by repeating and memorising than understanding it, just to score in the examinations. This also implies that students disrespect common occupations and perceive them as a lack of success.

Dore also suggested that when the third world countries start to develop, educational credentials will be used in a larger degree for occupational attainment, level of educational credentials will rise faster and schooling will become more examination orientated than before (Dore, 1997).

Many higher degrees possess less significant value in themselves. Besides representing as an occupational credential, education once represented social status. Collins (2011) suggested that educational credential inflation is mostly due to supply, not demand. There is extremely stiff competition to gain few good occupations out there, and this is raising the educational credential level needed. The educational system plays an important role in positioning the labour force, and thus keeping down the level of unemployment (Collins, 2011).

Overproduction of higher degree graduates and competition among employers to employ the elite among the graduates had caused rise in the level of educational credential needed for entry to any occupations (Dore, 1980). Increasing number of post secondary education institutions is mainly due to the changing value of educational credential in the labour market. As the number of degree graduates increased over time, the occupational level for the educational credential has decreased. Higher level occupations require increasingly higher and more specialized academic credentials. Lower degrees have not lost all value, but has increased within the educational system, as a way station towards acquiring yet higher levels of education (Collins, 2011).

Dore differentiates three motives for learning: learning for learning, learning to do a job, and learning to get a job. Dore suggests that in many societies, learning to get a job has come to take over the learning process. In substituting the other two motives for learning, it diminished the potential of schools to develop human capital (Pelletier, 1996). Students nowadays enrol themselves into the post secondary education institutions for the purpose of getting academic credential after graduating. The academic credential is the main requirement to getting a job. An increasing number of individuals vying for top executive positions, and even those applying for lower level positions, may be inflating their academic credentials in an effort to stand out (The Increasing Importance of Academic Credential Verification in a Tightening Economy, 2011).

The availability of the job depends mainly on academic credential. This can also be seen from the job advertisements that mainly focus on the candidates' academic credential rather than skills and job experience owned by the candidates. Students perceive their academic qualifications as having a declining role in shaping their employment outcomes in what is perceived to be a congested and competitive graduate labour market (Tomlinson, 2008). While academic credentials are still seen as a significant dimension of their employability, students increasingly see the need to add value to them in order to gain an advantage in the labour market (Tomlinson, 2008). This somehow does influence the education choice made by the students, which would influence their future.

## 3. STATEMENT OF PROBLEM

Educational system nowadays is not associated with gaining knowledge for performing occupations, personal development and self fulfilment, and learning for learning (Dore, 1980). The technical ability of the latest technique in modern industries, are normally acquired while performing it or through one's experience rather than in official educational institution (Collins, 2011). Employers cannot simply depend on the educational system to prepare students with the latest technical ability; this occupation related technical abilities are mostly acquired while performing the occupation. In looking for easily trainable employees, employers are proned to choose the graduate with the highest level of education credential, regardless of the real technical abilities that have been acquired (Thurow, 1976). This encourages more students to enrol in post secondary education institutions. This is due to no valuable technical abilities are achieved at lower level, and the relativity of education makes it essential for many occupations to possess a higher degree (Van de Werfhorst, 2009). Academic credentials are a major determinant of socioeconomic success (Ishida, Spilerman, & Kuo, 1997). Students are often attracted to post secondary education because of the career opportunities it may provide (Sevier, 1998). Paulsen (1990) stated that students often make post secondary education choices based on existing job opportunities for college graduates. Students are interested in outcomes (Sia, 2010). They are influenced by what graduates are doing, what graduate schools they attend and contributions that they are making to the society (Sevier, 1997). Consequently, employment opportunities can be seen as a significant predictor that influences the decision of post secondary education choice.

The increase in government educational spending could be attributed to the belief that education has the capacity to increase the income of an individual and life time earning of individuals (Ribich & Murphy, 1975). The government would like to use education as the mean to eradicate poverty in the country (Snodgrass, 1980). As in Malaysia, the amount of expenditure on education by Central Government has increased from RM 12489 million in 1996 to RM 54411 million in 2013 (Asian Development Bank, 2014). Although the contribution of education to one's income is still an argument, this had not discouraged the general belief that education plays a key role in improving one's income. People are relying too much on education. One should improve its own knowledge in the field they are involved in rather than a generalised field. As one of the measures suggested by Dore (1976) to overcome the "diploma disease" is by transforming post secondary education institutions into in career learning in special educational institutions (TVET).

## 4. OBJECTIVES OF STUDY

The purpose of this study is to provide enlightenment on the education choice of Malaysian polytechnics' students in terms of program enrolled and its academic credentials.

- 1. To examine whether there is an association between education choice on TVET among the Malaysian polytechnics students and the availability of desired program.
- 2. To examine whether there is an association between education choice on TVET among the Malaysian polytechnics students and employment opportunities.

# 5. ACADEMIC CREDENTIALS

In this study, academic credentials refer to the value that been placed on academic credentials by the Malaysian polytechnics' students. The availability of desired programs (Chapman, 1981) and employment opportunities (Dore, 1976) are included in this study as academic credentials.

# 5.1 Availability of Desired Program

Students select post secondary education institutions in which they believe they can get the courses they need to enter graduate school or to get jobs (Chapman, 1981; James, Baldwin, & Mcinnis, 1999). Indeed, the courses that are available and the benefits they will derive from those courses are the most important characteristics students look for in choosing a post secondary education institution. This is particularly true in professional and other somewhat specialized area of training and least true in content areas that are widely available. In addition, Sia (2011) also suggests that post secondary students in Sarawak do consider program as one of the important criteria in selecting post secondary institution. This is also supported by James et al. (1999) where they found that students focus strongly on broadly conceived courses and institutional reputations when making their selections for post secondary education institution.

## 5.2 Employment Opportunities

Dore differentiates three motives for learning: learning for learning (pleasurable use learning), learning to do a job (self regarding achievement learning), and learning to get a job (self regarding qualification seeking learning). Dore suggests that in many societies, learning to get a job (self regarding qualification seeking learning) has come to take over the learning process. The prospect of future employment is one of the reasons that motivate students in both developing and developed countries to pursue higher education. Joseph and Joseph (1998) noted that career opportunities greatly influenced potential students when choosing a university in New Zealand. Along with other factors, employment opportunities are perceived very important by high school students in the Philippines (Tan, 2009). Job prospect was also rated as one of the top important factors influencing student choice of a university in Indonesia (Kusumawati, 2013). In various empirical studies in the USA show that career opportunities are the most important factors that students consider when selecting a university (Sánchez, 2014).

## 6. METHODOLOGY

## 6.1 Participants

47 Malaysian conventional polytechnics' students with 18 enrolling in engineering (38.3%) and 29 (61.7%) in non engineering program were selected as the subject informants in this study. They comprise of 19 (40.4%) males and 28 (59.6%) female. The subject informants are from Malaysian conventional polytechnics located in the east coast of peninsular Malaysia. Malaysian conventional polytechnics are offering engineering and non engineering TVET programs that aim to create high skilled and educated workers.

## 6.2 Instrument

The instrument is a self administered questionnaire that was distributed to the respondents in the form of survey and then collected back for use as the primary data. A self administered questionnaire is a questionnaire that been constructed to be answered by the subject informants without any interruption of the researcher (Wolf, 2008). The questions in self administered questionnaire must be shorter, closed ended, stand alone and skips cannot be used (Bourque, 2004). For the purpose of this research, the questionnaire used consisted of two constructs namely, Availability of Desired Program and Employment Opportunities.

## 7. RESULT OF STUDY

SPSS version 21.0 is used in analysing the collected data. The frequency count is calculated to understand the breakdown of the subject informants. As the objectives of the study is to examine whether there is an association between academic credentials (availability of desired program and employment opportunities) and education choice on TVET among Malaysian polytechnics, rank biserial correlation coefficient is computed. Rank biserial correlation coefficient computes the correlation between one ordinal variable and one dichotomous variable (Yount, 2006). Table 1 below shows the result of the rank biserial correlation.

Table 1: Correlation between Education Choice and Availability of Desired Program and Employment Opportunities.

		Education
		Choice
Availability of	Rank Biserial Correlation	399**
Desired Program	Sig. (2-tailed)	.005
	N	47
Employment	Rank Biserial Correlation	250
Opportunities	Sig. (2-tailed)	.090
	N	47

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 1 shows that the p value of the rank biserial correlation for availability of program (p=.005) is less than 0.01. This means that there is association between availability of desired program and the education choice on TVET among Malaysian polytechnics' students, with the strength of the correlation (r=-.399) which is weak. While the p value of the rank biserial correlation for employment opportunities (p=.090) is more than 0.05. There for, we can claim that there is no association between employment opportunities and education choice on TVET among Malaysian polytechnics' students.

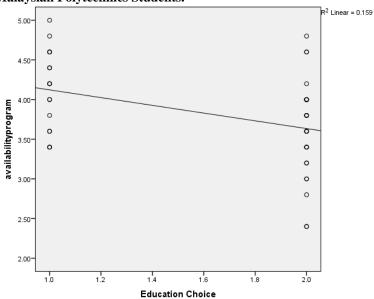


Figure 1: The Relationship between Availability of Desired Program and Education on TVET among Malaysian Polytechnics Students.

As shown in figure 1, x axis represents the education choice on TVET among Malaysian polytechnics students where 1 represented engineering and 2 represented non engineering, while y axis represents the level of availability of desired program. Figure 1 indicates that higher level of the availability of desired program is associated with lower level of education choice on TVET (engineering). This means that engineering students perceived the importance of availability of desired program more than the non engineering students do.

## 8. CONCLUSION

This research shows that there is a weak association between the availability of desired program in Malaysian polytechnics, and their education choice on TVET in terms of programmes enrolled. On the other hand, this research also shows that there is no association between the employment opportunities in Malaysian polytechnics, and their education choice on TVET in terms of programmes enrolled. Thus, in the efforts of promoting and marketing the Malaysian polytechnics to SPM leavers that are interested in engineering program, polytechnics administrators should customise the promoting plan by focusing on the availability of the desired program to them. Future research suggested to be carried out is on exploring the other academic credentials' variables such as the quality and the reputation of the program offered on education choice on TVET among Malaysian polytechnics students. Future research could also be carried out on other post secondary TVET institutions students in Malaysia.

## REFERENCES

Asian Development Bank. (2014). Key Indicators for Asia and the Pacific 2014. Asian Development Bank.

Bourque, L. B. (2004). Self-Administered Questionnaire. In M. S. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *Encyclopedia of Social Science Research Methods* (pp. 544–545). Thousand Oaks: Sage Publications.

Chapman, D. W. (1981). A Model of Student College Choice. *The Journal of Higher Education*, 52(5), 490–505.

Collins, R. (2011). Credential Inflation and the Future of Universities. *Italian Journal of Sociology of Education*, 2, 228–251.

Companies Commission of Malaysia. (2013). Education for Sustainable Development: Promoting Technical Education and Vocational Training (TVET).

Dore, R. (1976). *The Diploma Disease: Education, Qualification and Development* (1st ed.). London: George Allen & Unwin Limited.

Dore, R. (1980). The Diploma Disease Revisited. Institute of Development Studies Bulletin 11.2.

Dore, R. (1997). The Argument of the Diploma Disease: a summary. Assessment in Education: Principles,

- Policy & Practice, 4(1), 23-32.
- Ishida, H., Spilerman, S., & Kuo, H. S. (1997). Educational Credentials and Promotion Chances in Japanese and American Organizations. *American Sociological Review*, 62(6), 866–882.
- James, R., Baldwin, G., & Mcinnis, C. (1999). Which University? The factors influencing the choices of prospective undergraduates. Melbourne.
- Joseph, M., & Joseph, B. (1998). Identifying needs of potential students in tertiary education for strategy development. *Quality Assurance in Education*, 6(2), 90–96.
- Kusumawati, A. (2013). Students 'perceptions of choice criteria in the selection of an Indonesian public university. University of Wollongong.
- Mazovian Centre for Regional Survey. (2013). Trends in Educational Choices of Students of Higher Education Institutions in Mazovia Compared to thr Local Labour Market Needs. Warsaw.
- Paulsen, M. B. (1990). *College Choice: Understanding Student Enrollment Behavior*. The George Washington University.
- Pelletier, D. (1996). Diploma Disease. *Economy and Humanism: From Communitarian Utopia to Struggle on Behalf or the Thirs World*, (1996), 121–126.
- Ribich, T., & Murphy, J. (1975). The Economic Returns to Increased Educational Spending. *The Journal of Human Resources*, 10(1), 56–77.
- Sánchez, J. S. (2014). Factors influencing a student 's decision to pursue a communications degree in Spain. *Intangible Capital*, 8(1), 43–60.
- Sia, J. K. M. (2010). Institutional Factors Influencing Students 'College Choice Decision in Malaysia: A Conceptual Framework. *International Journal of Business and Social Science*, *1*(3), 53–58.
- Sia, J. K. M. (2011). Post-Secondary Students' Behaviour in the College Choice Decision. *Journal of Marketing Research and Case Studies*, 2011, 1–15.
- Snodgrass, D. R. (1980). *Inequality and Economic Development in Malaysia* (1st ed.). Selangor, Malaysia: Oxford University Press.
- Tan, C. J. (2009). College Choice in the Philippines. University of North Texas.
- The Increasing Importance of Academic Credential Verification in a Tightening Economy. (2011).
- Tomlinson, M. (2008). "The degree is not enough": students' perceptions of the role of higher education credentials for graduate work and employability. *British Journal of Sociology of Education*, 29(1), 37–41.
- Tsang, M. U. N. C., & Levin, H. M. (1985). The Economics of Overeducation. *Economics of Education Review*, 4(2), 93–104.
- Van de Werfhorst, H. G. (2009). Credential inflation and educational strategies: A comparison of the United States and the Netherlands. *Research in Social Stratification and Mobility*, 27(4), 269–284.
- Wolf, J. (2008). Self-Administered Questionnaire. In P. J. Lavrakas (Ed.), Encyclopedia of Survey Research Methods (pp. 804–805). Thousand Oaks: Sage Publications.
- Yount, W. R. (2006). Research Design & Statistical Analysis in Christian Ministry (4th ed.). United States of America.

# **AUTHOR BIOGRAPHY**

Foo Jyy Wei was born in Kuala Terengganu, Terengganu in 1978. She had her early education at Sekolah Rendah Jenis Kebangsaan (C), Kuala Terengganu, Terengganu. She then continued her secondary education at Sekolah Menengah Chung Hwa Wei Sin, Kuala Terengganu, Terengganu. She completed her Bachelor of Science in Electrical Engineering at Institut Teknologi Tun Hussein Onn, Batu Pahat, Johor in 2001. She, then, pursued her Master of Technical and Vocational Education at Kolej Universiti Teknologi Tun Hussein Onn, Batu Pahat, Johor in 2003. Her career started when she joined the Department of Polytechnics Education, Ministry of Higher Education since 2003. She is now pursuing her Doctor of Philosophy in Educational Management and Leadership at Universiti Sains Malaysia.