ACCREDITATION OF PRIOR EXPERIENTIAL LEARNING AND DEMOCRATISATION OF EDUCATION: EMPIRICAL EVIDENCE USING MULTIPLE REGRESSION ANALYSIS

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ABSTRACT

Access to education is still a worldwide problem due to various inequalities. The Malaysian Qualifications Agency (MQA) introduced the Accreditation of Prior Experiential Learning (APEL) mechanism which enables individuals who have work experience but lack in formal academic qualifications to pursue their studies at higher educational institutions. APEL Centre is an approved assessment centre for MQA. The main purpose of this study is to examine the relationship between service quality provided by APEL Centre, awareness on APEL and democratisation of education. A literature review to build the research instrument. Survey questionnaires were administered and a total of 168 were usable responses from Open University Malaysia (OUM). Face-to-face data collection procedure was adopted. A total of 63% of the respondents were aware of the entry requirements using APEL whereas 27% needed more clarification. The candidates who obtained the services from APEL Centre were interested to gain admission in Diploma (3%), Degree (58%) and Master (39%) programmes in Malaysia. The data collected were cleaned and issues related to data normality (Kurtosis < 3.00; Skewness < 1.00) were primarily resolved. The Cronbach Alpha for service quality of APEL Centre (a = 0.97), awareness on APEL (a = 0.94) and democratisation of education (a = 0.96) were far above acceptable. The reported R square (0.54) indicated goodness of fit of the total regression model. Service quality provided by APEL Centre (p = 0.01) and awareness on APEL (p = 0.02) were both significant variables when examined against democratisation of education in OUM. The empirical evidence given clearly implies that APEL can help increase access to education. The role of informal and non-formal education can heighten global citizenship of the candidates. Future researchers are recommended to validate the existing measurement by performing confirmatory factor analysis and qualitative interviews to narrow the methodological gap available.

Keywords: Accreditation of Prior Experiential Learning, Democratisation of Education, Regression and Service Quality

INTRODUCTION

According to Grapragasem et al. (2014), governance on higher education in Malaysia has improved since independence in 1957 to fulfil the demand for quality education. It is crucial that learners are able to grasp the relevant knowledge, skills and attitude to be successful in life. The importance of education in people's lives is being gradually acknowledged in today's globalised world. This is to prepare the workforce to be democratic citizenship of the future. Malaysia places high importance on education to empower individuals for social transformation and evidence can be given to defend this claim. Recently, the education ministry remains the single largest recipient of budget allocation at RM60.2 billion or 19.1% of the total budget in 2019. This was announced at the presentation of the Malaysia Budget 2019 in Parliament. Although the fact remains the same that education is a fundamental building block for human development, access to education is still a worldwide problem due to various inequalities. Barriers like entry requirements sometimes may not allow some learners to pursue their dreams. Thus, the Malaysian Qualifications Agency (MQA) introduced the Accreditation of Prior Experiential Learning (APEL) mechanism which enables individuals who have work experience but lack formal academic qualifications to pursue their studies at higher educational institutions. APEL is the recognition of learning that has been acquired through life and work experiences. The learning could have arisen from experience in the workplace, from working in an unpaid capacity (e.g. voluntary/ charity work), or from family life and leisure activities. The principle upon which APEL rests is that all learning should be recognised, wherever, however, and whenever it takes place. This mechanism provides opportunity to the masses to enhance their social status by enrolling in a higher education programme and completing it for a better future. Candidates who wish to gain admission will apply to MQA and then may choose APEL Centre as their assessment centre. Upon passing the APEL assessment, they will obtain a certificate from MQA which will enable them to pursue their studies in an institution of their choice. Equal opportunities in education and fairness in assessment are fundamental principles that must be observed by APEL Centre, at the same time providing quality services to this group of people. This requires huge efforts among the administrators of the university. One of the ways this can be achieved is by providing service quality. Quality has become an important subject of discussion among Higher Educational Institutions (HEIs), and has been extensively studied in recent years. Researchers, management and policy makers from the academia are still looking into some of the best practises to harness the power of service quality to improve students' satisfaction in the Malaysian Private Higher Educational Institutions (Raghavan & Ganesh, 2015). To ensure satisfaction of candidates, OUM will need to determine first, which services candidates prefer and second, whether they are satisfied with them. The aim of this paper is to examine the relationship between service quality, awareness and democratisation of education.

Significance of APEL Centre

Open Entry Admission System was introduced in Malaysia in 2006. This system has paved the way for people to pursue lifelong learning. The main objective here is to focus on development of human capital. Open University Malaysia (OUM) was the first open and distance learning institution that was given the mandate to implement this system in the country. Through open entry, individuals who did not meet the conventional entry requirements could leverage on their work experience to gain admission into OUM. Due to the snowballing effect in enrolment through open entry, APEL was introduced in 2016. APEL is defined as a systematic process that involves the identification, documentation and assessment of prior experiential learning, i.e., knowledge, skills and attitudes, to determine the extent to which an individual has achieved the desired learning outcomes, for access to a programme of study and/or award of credits (MQA, 2014). At present, APEL Centre is appointed by the Malaysian Qualifications Agency (MQA) which plays an active role in democratising education by providing opportunities to the masses. The Centre ensures that all its initiatives and practices adhere to the regulations outlined by MQA.

FOCAL LITERATURE TO DEVELOP RESEARCH INSTRUMENT

This paper intends to examine the relationship between service quality, awareness on APEL and democratisation of education. Thus, it is imperative that the measurements are established before conducting a quantitative analysis. Service quality is the discrepancy expectations and actual offerings and it has been widely studied by previous authors like Zeithaml (1987) and Parasuraman et al. (1988). According to them, service quality is defined as customers' judgement about their experience. Parasuraman et al. (1988) is a prominent literature in which they have identified ten dimensions of service quality: tangibles, reliability, responsiveness, competency, courtesy, communication, credibility, security, access and understanding. Over the time, theses variables finally were factored to five main constructs. The consensus view seems to be classify them as 1) tangibles 2) reliability 3) responsiveness 4) assurance and 5) empathy. Along similar lines, APEL seeks to recognise skills and knowledge that have evolved from formal, informal and non-formal learning experiences and is supposed by some to be 'a powerful tool for bringing people into the ODL learning system'. Candidates must be able to define and know the differences between formal, informal and nonformal learning. They have to be aware of the opportunities available so that the chances of enrolment are higher. According to MQA (2014), formal learning is intentional learning in an organised and structured context such as recognised school and university whereby there is formal recognition. On the other hand, informal learning takes place continuously through life and work experiences. Finally, non-formal learning takes place alongside the mainstream systems of education and training. It may be assessed but does not normally lead to formal certification. The literature of Peters (2004) has clearly discussed the inputprocess-output elements for inclusive educations. Educational institutions, student characteristics and community characteristics are some of the inputs. They go through the proper process of learning in view of achieving the ultimate goal, which is to be able to have literacy, positive attitude, self-esteem, social skills, citizenship and determination. These items are used to measure democratisation of education in the framework presented in the conceptual framework of this paper.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Conceptual framework presented in Figure 1 clearly shows the hypothesised relationships. There are two main hypotheses in this study that will be able to satisfy the research objectives:

- H1: There is a relationship between service quality and democratisation of education
- H2: There is a relationship between awareness of APEL and democratisation of education

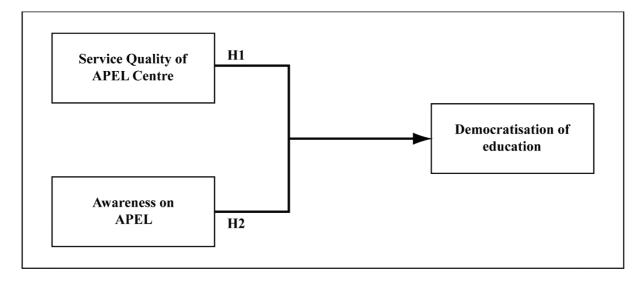


Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

This quantitative study used a questionnaire to obtain feedbacks from respondents. Items measuring the three variables were largely derived from the literature review. Likert scale was used to measure the perception of the APEL candidates. Focal literature was examined prior to developing the research questionnaire. Thereafter, the questionnaire was given to a few academicians to get some content validation, in view of enhancing the understandability of the items. Convenient sampling and face to face data collection methodologies were adopted for this study. The data were collected with the assistance of a research assistant. Prior to the conduct of regression analysis, reliability and normality indices were calculated. It will be presented later in this paper. A total of 200 candidates who came to OUM to do their aptitude test and submit their portfolios were approached data collection, out of which 168 provided replies. Table 1 below provides participants' demographic information in details.

Table 1: Demographic Profile of Respondents

Items Particulars		Frequency	%	
Age group (Years)	20 – 25	26	15.5	
	26 – 30	28	16.7	
	31 – 45	99	58.9	
	46 – 50	11	6.5	
	51 – 55	3	1.8	
	Above 56	1	0.6	
Gender	Male	95	56.5	
	Female	73	43.5	
Employment Status	Employed for wages	145	86.3	
	Self employed	21	12.5	
	Retired	2	1.2	
Organization	Public sector	48	28.6	
	Private sector	112	66.7	
	Others	8	4.8	
Level of Intended Study	Diploma	5	3	
	Bachelor	98	58.3	
	Master	65	38.7	
Level of Management	Low level management	26	15.5	
	Middle level management	118	70.2	
	Top level management	24	14.3	
Familiar with APEL Admission (A)	Yes	105	62.5	
	No	63	37.5	

Normality and Reliability

Assessment of normality for all the items in Table 2 is scrutinized using Kurtosis and Skewness. For a normal distribution to take place, Kurtosis should be between 0 and 3 (Lei & Lomax, 2005) whereas skewness must be between -2 to +2 (Weinberg & Abramowitz, 2002). This can be observed clearly for all the 21 items shown in Table 2 below. The measures for reliability in this study are all above 0.70 as suggested by Nunnally (1978), indicating internal consistency for all the constructs.

Table 2: Data Normality and Reliability

N.T.	Measurement	Kurtosis	Skewness	Alpha
No	Service Quality			
1	I am pleased with the prompt service delivered by APEL Centre	661	478	0.97
2	I have trust in APEL Centre in managing the APEL processes	1.118	960	
3	I believe the APEL Centre staff can demonstrate care towards my needs	268	530	
4	I perceive the communication materials given by APEL Centre were clear	1.358	842	
5	I consider APEL Centre as a reputable department in handling APEL processes for MQA	438	673	
6	I have received individualized attention from APEL Centre in my application process	.563	692	
7	I am happy when using the physical facilities in APEL Centre	.712	790	
8	I am glad to notice the willingness of APEL Centre staff in helping me	.034	600	
9	I am glad when using the equipment provided by APEL Centre	.036	492]
10	I will recommended APEL Centre as an APEL assessment Centre to people (word of mouth)	494	609	
11	I have confidence in APEL Centre in managing the APEL processes	.933	855	
	Awareness on APEL			
12	I am familiar with the term 'formal learning'	.061	437	0.94
13	I am familiar with the term 'nonformal learning'	.345	555	
14	I am familiar with the term 'informal learning'	414		
	Democratization of Education			
15	I believe the APEL mechanism contributes in personal development among learners	491	674	0.96
16	I believe the APEL mechanism assists to shape positive attitude towards learning	488	688	
17	I believe the APEL mechanism helps to improve literacy among learners	435	686	
18	I believe the APEL mechanism helps to advance self-esteem among learners		734	
19	I believe the APEL mechanism enhances self-determination among learners		730	
20	I believe the APEL mechanism imparts independent living skills among learners	.791	739	
21	I believe the APEL mechanism helps to produce good citizenship among learners	737	573	

Regression Analysis and Findings

Multiple regression analysis is used to examine the relationship between one dependent variable and a number of independent variables. It is based on correlation, but it also examines a refined relationship between the set of variables according to Pallant (2016). In view of examining both hypotheses in this study, a multiple linear regression is performed. The adjusted R square is calculated to present how much the model explains the variations in the dependent variable, which in Table 3 is 0.53. This means that the service quality and awareness on APEL are relevant to democratisation of education. The regression model is valid because the significant level of ANOVA is below 0.05 as reported in Table 4. Goodness of model fit is justified. Finally, the coefficients are reported in Table 5 of this study.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732	.536	.530	.48030

Table 4: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	43.937	2	21.969	95.229	.000
Residual	38.064	165	.231		
Total	82.001	167			

Based on what is established in Table 5 below, H1 is supported because the p value < 0.05. There is a relationship between service quality of APEL Centre and democratisation of education. Consistently, H2 is also supported (p = 0.02). It can be summarised that there is a significant relationship between awareness of APEL and democratisation of education. The implications and suggestions for future study arising from these findings will be explained in the subsequent sections of this paper.

Table 5: Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	.923	.244		3.781	.000
Services of APEL	.683	.063	.654	10.827	.000
Awareness on APEL	.118	.050	.141	2.340	.020

IMPLICATIONS

Based on what is established in the descriptive analysis and regression results, some implications can be made in this paper. Here are six implications from this study:

- 1. A total of 59% of respondents are interested to pursue education come from the age range of 31–45 years old and mostly are employed for wages (86%). Marketing strategy of ODL universities must focus more on this group of people.
- 2. The candidates who are interested in the APEL mechanism are mostly coming from private sector (67%) as compared to public sector (23%). Most of them are interested to do Degree programmes (58%) as reported in the descriptive analysis. Therefore, proper branding strategies must be carved in future to create more awareness to both groups of people in public and private sectors. Word of mouth communication may also be helpful.
- 3. A total of 63% of respondents are aware of APEL admission requirements whereas 27% of the rest still need more clarification. As stated in the introduction, barriers like entry requirements may hinder progress of people. Thus, everyone must be informed on the APEL admission requirements.
- 4. Prompt service and more care must be shown to people who are in low management so that more people are interested in APEL. Currently, a majority of 70% is coming from middle management.
- 5. Since there is a significant relationship in the regression model between service quality and democratisation of education, APEL Centre must ensure that all that the five dimensions of service quality (reliable, tangible, responsiveness, assurance and empathy) are well preserved at all times in future. This will help candidates to achieve literacy and enhance their positive attitude.
- 6. The process from application to assessment to declaration of APEL results must be clearly communicated so that candidates are aware of formal, informal and nonformal learning. They will prepare better portfolios which will enhance their chances of getting admission in view of enhancing their social skills and citizenship.

SUGGESTIONS FOR FUTURE RESEARCH

Two suggestions are given to future researchers. Firstly, they are recommended to validate the existing measurement by performing confirmatory factor analysis (CFA). This will open path for more research papers to be published in the interest of APEL. Methodologies like structural equation model can also be conducted by future researchers when CFA is done. Secondly, future studies can focus on performing qualitative interviews to narrow the methodological gap. This will help universities understand the stakeholders better. Eventually aiding universities to carve strategies in view of enhancing stakeholders' satisfaction so that education can be democratised in the most effective and efficient manner.

REFERENCES

- Grapragasem, S., Krishnan, A. & Mansor, A. N. (2014). *Current trends in Malaysian higher education and the effect on education policy and practice: An overview.* International Journal of Higher Education, 3, p 85.
- Lei M. & amp; Lomax R. G. (2005). "The effect of varying degrees of non-normality in structural equation modeling", Structural Equation Modeling: A Multidisciplinary Journal, 12(1), 1–27.
- Malaysian Qualification Agency. (2014). APEL Handbook for Learners. Retrieved from http://www2.mqa.gov.my/APEL/pdf/HbookEngLvl7.pdf
- Nunnally, J. D. (1978). Psychometric theory. New York: McGraw-Hill.
- Pallant, J. (2016). SPSS Survival Manual a Step by Step Guide to Data Analysis Using SPSS Program. 6th Edition, McGraw-Hill Education, London.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality", Journal of Retailing, Spring, 12–40.
- Peters, S. (2004). *Inclusive Education: An EFA Strategy for all Children*. Retrieved on February 20, 2019 from http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079993288/InclusiveEdu efa strategy for children.pdf
- Raghavan, S., & Ganesh, R. (2015). Addressing service quality to increase students' satisfaction and retention in Malaysian private higher education institutions. American Journal of Economics 5 (2), 243–250.
- Weinberg, S. L., & amp; Abramowitz, S. K. (2002). *Data analysis for the behavioral sciences using SPSS*. Cambridge, U.K: Cambridge University Press.
- Zeithaml, V. (1987). *Defining and relating price, perceived quality and perceived value*. Cambridge, MA: Marketing Science Institute.