

Student Profile : Implications on Trend and Academic Performance by Region

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Abstract

The recognition of the student profile provides strategic information in two fold : able to identify the enrolment trend among learners and also can extrapolate their academic performance by region. The significant of this study is to identify natural segmentation of our OUM learners by region for the Faculty of Business and Management by mean of cross-sectional data for the year 2011. Student data will be limited to social economic background, location, work place, position held and latest qualification. Several researches indicate that, family background and occupation were among important elements of success in college (Brown, 1999). Family attitudes about education and acquiring college degree influence success in college (Leppel, Karen, Williams, and Waldauer, 2001). There was a strong correlation between CGPA and career maturity among university students (Zanariah, Ishak and Nazihah, 2012). Implications from this study should be able to unfold several issues; success factors among OUM learners, concentration of learners by region and influence of location and occupation on academic performance.

Keywords: *enrolment trend, natural segmentation, social economic.*

Introduction

As one of the online distance and learning institution in Malaysia, Open University Malaysia is one of the famous university among many private universities in Malaysia. The main focus of this paper is to identify the enrolment trends among OUM students that also can extrapolate their academic performance by region. Mean of cross-sectional data for the year 2011 will be used in order to identify the natural segmentation of our OUM learners by region for the Faculty of Business and Management. So, why enrolment trend of OUM students? There are many factors that effect the enrolment trend among learners that have been proved by a few scholars in this particular area such as Honnold and Keeter (1989) were study on enrollment decisicions of Virginia Community College Students with 601 respondents through telephone interview. While Chaikind (1987) examined recent trends in the enrolment of African-American and white high school graduates college aged 18-24 years old. The main factors of this study is family income, when family income is increased, the tendency of the enrolment of African-American and white are also increased. With this figure, it supported what Brown (1999) have said about his research on the family background and occupation were among important elements of success in college.

Literature Review

According to Knowles, Holton and Swanson (2005), the learners are all adult that have their own thought especially on the principles of adult leaner. This is very much related to the enrolment trend in Malaysia and also other countries. Principles of adult learning are actually the self actualisation about what they actually want(Knowles, et al., 2005, p. 64).Adults are internally motivated and self-directed. Among the principles of adult learners are 1) adults bring life experiences and knowledge to learning experiences; 2) adults are goal oriented; 3) adults are relevancy oriented; 4) adults are practical and 5) adult learners like to be respected. Indirectly, the enrolment trend among students has been identified and influenced by principles of adult learning supported by the literature reviewed.

While McMillan and Western (2000), studied on social-economic status of Australian higher education students. In order to be able to identify such individuals for targeted interventions and to monitor their participation rates, it is necessary to have an accurate, simple to administer, and relatively inexpensive method of measuring students' socio-economic characteristics. Measurements have been developed based on the characteristics of individual students, rather than the characteristics of the area in which they reside. These new measures are based upon the results of the Participation in Higher Education Survey.

The survey was conducted in the second half of 1997 and was based upon a sample of approximately 3000 first year students enrolled at a range of campuses throughout one Australian State. The findings suggested that individual-based measures relating to the occupation and education of parents at the time when the student was in high school are appropriate for the classification of both recent school leavers and mature aged students. Together, these characteristics represent the family socio-economic situation while the student was attending secondary school. With that scenario, socio-economic can be one of the important factor for success in a higher education intitution.

While Sanders and Poynter (1989) have studied on the local economy and the adult learner enrollment behavior. The economic indicators were analyzed for possible relationships between the local economy

and adult enrollment. Results suggest enrollments do move with the local economy, but average credit hours increase rather than decrease as the economy slows.

The Theory

Learning Theories and Principles of Adult Learning

Learning theorists assert adults learn differently and have different reasons for learning than children. The term andragogy was first used by Alexander Kapp in 1833, but it was Malcolm Knowles who began developing a theory and principles of andragogy in 1968. The first assumption of adult learning theory states that adult learners "need to know why they need to learn something before they undertake to learn it" (Knowles, et al., 2005, p. 64).

Many factors affect why adults seek education. Education in subject matter that will make a positive contribution to the individual's life is of the most importance and is most likely to be sought by the learner (Merrim, Caffarella and Baumgartner, 2007). While Ashb (2009) said that both state and local Community-based Organisation (CBO) predict that enrollment will grow exponentially if it keeps pace with the demand created by population growth.

However, among the principles of adult learning are 1) adults bring life experiences and knowledge to learning experiences; 2) adults are goal oriented; 3) adults are relevancy oriented; 4) adults are practical and 5) adult learners like to be respected.

Methods

Sample

The study was conducted on Open University Malaysia (OUM) Learning Centres particularly from Bangi, Petaling Jaya and Shah Alam Learning Centres – covering the Klang Valley Region. The respondents were students of Open University Malaysia with various background on age, experiences, difference fields, and also difference positions in their job. Screening for sampling was done through information collection about all the students from three different learning centres of OUM in Klang Valley Region. The target population of the study were students of OUM in Klang Valley Region.

Instrument and Measurement

The main research instrument in this study is the demographic profile of OUM students. The mean of cross-sectional data for the year 2011 will be used for this study. Questionnaires were formulated based on the demographic profile of OUM students and adopted a multi-item scales which have been modified accordingly to suit the context of the study: enrolment trend among learners. The questionnaire was

developed through literature review and a mix and match approach was undertaken to modify or completely withdraw sentences wherever necessary to suit the local context.

Students profile on demographic will be limited to social economic background, location, work place, position held and latest qualification. Several researches indicated that, family background and occupation were among important elements of success in college (Brown, 1999). Family attitudes about education and acquiring college degree influenced success in college (Leppel et al., 2001). There was a strong correlation between CGPA and career maturity among university students (Zanariah et al., 2012).

Model and Analysis

Descriptive-correlational research combines descriptive and correlational studies. A descriptive study is concerned about describing the current status of subjects in a study. A correlation study determines the existence or non-existence of relationships (or the lack of it) between variables in order to make predictions, though the existence of a relationship between two variables through a correlational study does not necessarily imply causation. Correlational methods are widely used to describe any non-experimental methods (e.g. survey or time series) (Chen & Popovich, 2002).

The descriptive analysis was described as an inferential procedure in which mean and frequency were compared (Aguinis, 2004; Aiken and West, 1991; Cohen and Cohen, 1983; Jaccard et al., 1990).

A cross tabulation (often abbreviated as cross tab) displays the joint distribution of two or more variables. They are usually presented as a contingency table in a matrix format. Whereas a frequency distribution provides the distribution of one variable, a contingency table describes the distribution of two or more variables simultaneously. Each cell shows the number of respondents that gives a specific combination of responses, that is, each cell contains single cross tabulation.

Results and discussion

The demographic profile provides an overall view of the characteristics of the OUM students. As depicted in Table 1, there were 58.1% males as compared to 41.9% females in the overall sample. The gender bias in this study was not that obvious as compared to the results, where male students heavily represented the population compared to female students, only for this particular study. However, based on actual data from OUM, female students actually represented the population of overall students as compared to males.

Table 1: Distribution of Respondents by Demographic Variables (n=31)

Demographic Variables	Frequency	Per cent
Gender		
Male	18	58.1
Female	13	41.9
Age group		
Below 30 years old	8	25.9
30 – 39 years old	15	48.6
40 – 49 years old	5	16.0
Above 50 years old	1	3.2
Ethnic		
Malay	22	71.0
Chinese	1	3.2
Indian	7	22.6
Others	1	3.2
Education		
Master Science	1	3.2
Diploma	16	51.6
STPM	3	9.7
SPM	11	3.5

The distribution of respondents by their age group is depicted in Table 1. The majority of the respondents were distributed in the age group of below 30 years 25.9% as compared to 48.6% for the age group of 30-39 years which is the highest and 16.0% for 40-49 years, and 3.2% for those above 50 until 64 years of age. The average age was 34 years ($SD=7.3997$) with the youngest being 25 years old and the oldest among the respondents being 58 years. The ethnic components comprised of 71.0% Malays, 3.2% Chinese, 22.6% Indians and 3.2% others.

As noted in Table 1, the majority of respondents who had diploma was 51.6%, which means that they used it to enrol for bachelors' degree in OUM. However, the respondents were noted to be better educated with almost 3.2% from the postgraduate degree level, and 9.7% from the STPM and 3.5% for those who possessed SPM certificates. With the above results, what we can conclude that the trend of enrolment is actually based on the latest educations, and the maturity in acquiring the knowledge to higher level. This is also supported by (Leppel et al., 2001) that family attitudes about education and acquiring college degree influenced success in college.

As indicated in Table 2, the finding of this study revealed some information about the trend factors for OUM students based on the real case study, which included monthly income and years of employment.

With regards to monthly income, the majority constituting 12.9% earned below RM1,500 followed by 29.0% earning between RM1501- 2,500, 51.6 earning between RM2501- 5000, and 6.5% above RM5,000. As the income bracket increases, the number of cases decreases, implying a small number of respondents with very high monthly income.

Table 2: Professional Profile of Respondents

	Frequency	Percent
Monthly Income (RM)		
Below 5000	4	12.9
5001 – 7500	9	29.0
7501 - 10000	16	51.6
Above 10000	2	6.5
Tenure (Years)		
Below 10	15	48.4
11 – 20	11	35.5
21 – 30	3	9.7
Above 30	2	6.5

Table 2 indicates the total years of work experience of the respondents. The respondents had worked an average of 19 years in their career, with a minimum of 1 year and a maximum of 39 years with the current employer. The majority of 48.4% had less than 10 years of work experience, followed by 35.5% with 11-20 years of employment, and 9.70% with 21-30 years of work experience. The lowest, 6.5%, falls in the last category of having more than 30 working years.

From Table 3 on crosstab analysis tells us that among the students who have highest education for their enrolment into bachelors' degree, 66.7% through STPM, 36.4% through SPM, 18.8% through Diploma and have attained their CGPA between 2.1 to 2.5 with the total of 9 respondents which is equivalent to 29.0%. SPM is the highest education level attained before enrolling in OUM at 63.7% which CGPA earned by the students between 2.6 to 3.0, Diploma 37.5%, STPM 33.3% with the total of 15 respondents with the total of 48.4%. For those who have CGPA between 3.1 to 4 flat only 43.8% with only 6 respondents from Diploma holders with the total of 22.6%. Thus, what we can conclude from this crosstab is that the highest education level used for enrolment would not be a factorto determine their CGPA in their study.

Table 3: Crosstabulation

			Highest Education Level				
			Master	Diploma	STPM	SPM	Total
CGPA * Highest Educational Level used for Enrollment	Crosstabulation						
CGPA 2.1 - 2.5	Count		0	3	2	4	9
	% within Highest Educational Level		.0%	18.8%	66.7%	36.4%	29.0%
2.6 - 3.0	Count		1	6	1	7	15
	% within Highest Educational Level		100.0%	37.5%	33.3%	63.6%	48.4%
3.1 - 3.5	Count		0	6	0	0	6
	% within Highest Educational Level		.0%	37.5%	.0%	.0%	19.4%
3.6 - 4.0	Count		0	1	0	0	1
	% within Highest Educational Level		.0%	6.3%	.0%	.0%	3.2%
Total	Count		1	16	3	11	31
	% within Highest Educational Level		100.0%	100.0%	100.0%	100.0%	100.0%

Conclusion

Due to small sample size (n=31) and limited coverage of sampling units, namely learners in Shah Alam, Petaling Jaya and Bangi campuses, the outcome of the study is not conclusive and raises several doubts. However, its findings maybe able to cast some inferences and indications for further studies pertaining to its original objectives.

As the nature of OUM ; working and studying, thus, majority of our learners are within the age of 30 to 39 years old (48.6 %) and 51.6% are diploma holders and are pursuing their first degree in various field

of studies. In terms of income level, majority (51.6%) are earning between RM 7,500 and RM 10,000 monthly, which is considered on the high side with majority of working experience for almost 10 years followed by 11 to 20 years of working experience.

The focus of this study is to gauge learners academic performance as to several socio-economic background within a limited sample size and study centre. Hence, the main and only finding for discussing from this study is from Table 3. As shown from Table 3, learners from the three learning centers were enrolled based on their latest qualification namely, diploma, STPM, SPM and Masters. It was highly hypothesized, by research and experience, college or university students' academic performance are very much influenced by their basic qualifications or precisely, admission criteria and for this case study, diploma, STPM and SPM.

From Table 3, those diploma holders have a wider spread of CGPA achievements ranging from 2.1 upto almost 4.0 where majority are between 2.6 to 3.5 (75%) CGPA. As for those with STPM, 66.7% achieved CGPA between 2.1 to 2.5 and the rest with CGPA between 2.6 to 3.0. However, the reverse occurred to SPM holders.

Several inferences can be concluded from this scenario. Firstly, the diploma holders have acquired a certain level of maturity and probably some working experience and have a growing family, thus their academic achievements were more diverse and wider spread. Secondly, for the STPM holders, majority of them congregate within CGPA of 2.1 to 2.5 (66.7%) and thirdly, the reverse occurred among SPM holders. Hence, due to several limitations as mentioned earlier, no conclusive findings can be portrayed from this brief study. However, several indicators can be of beneficial for further research based on learners in OUM.

Firstly, the superiority of diploma, STPM and SPM in predicting long-term university outcome is inconsistently evident across all academic disciplines, learning centers and learners cohort. This is due to the diverse nature of our learners trend.

Secondly, intuition suggest that, are large proportion, probably more than 50% variance in cumulative university grades are unaccount for and unexplained. Learners experience after admission such as financial issues, social support and academic engagement in the university.

Thirdly, given the differences in entry mode ; diploma, STPM, SPM and flexible entry, it is widely perceived that no definite, accurate, methodologically rigorous and reliable indicator to gauge learners' performance in university.

Fourth, work related courses or field of study, can be of major consideration in learners performing well in their academic grades.

Fifth, maturity and raw intellectual ability is important plus other qualities as motivation, personal discipline and perseverance are critical for achieving and maintaining good grades in university.

Six, given our limited ability to predict learners academic performance while in university, their good entry academic qualification and working experience will exhibit to some extent "content" and "face validity" as well as "predictive validity" which bear a direct and transparent relationship to university level education in terms of knowledge and skill that are unquestionable important in university study.

It has been a continuous debate over entry requirement to university can provide a fair, more equitable and ultimately more meaningful basis for admission, decision-making and despite their reputation as “unreliability”. Nevertheless, it remains the best available indicator with which to hazard predictions of learners success in university.

References

- Aguinis, H. (2004). *Regression Analysis for Categorical Moderators*. The Guilford Press, New York, London
- Aguinis, H., Henle, C. A., & Ostroff, C. (2001). Measurement in work and organizational psychology. In N. Anderson, D.S. Ones, H.K. Sinangil, & C. Viswesvaran (Eds.), *Handbook of Industrial, Work and Organizational Psychology*, Vol. 1 Personnel Psychology (pp. 27-50). London: Sage
- Aiken, L. H. & Sloane, D. M. (1997). Effects of organizational innovations in AIDS care on burnout among urban hospital nurses. *Work and Occupations*, 24, 453-477.
- Aiken, L. S., & West, S. G. (1991). *Multiple Regression: Testing and interpreting interactions*. Newbury Park, CA: Sage
- Ashb, C. M. (2009). Diverse Federal and State Efforts to Support Adult English Language Learning Could Benefit from More Coordination. *GAO Reports*, 1.
- Brown, C. (1999). "Teaching new dogs new tricks: The rise of entrepreneurship education in graduate schools of business." *DIGEST* 99(2): 1-4.
- Chaikind, S. (1987). *College Enrollment Patterns of Black and White Students*. U.S.; District of Columbia.
- Cohen, J. & Cohen, P. (1983). *Applied Multiple Regression / Correlation Analysis for the Behavioral Sciences*. 2nd ed. Hillsdale, NJ: Erlbaum.
- Honnold, J. A., & Keeter, S. (1989). *Survey of Enrollment Decisions of Virginia Community College Students*. U.S.; Virginia.
- Knowles, M. S., Holton, E. F., & Swanson, R. A. (2005). *The adult learner: The definitive classic in adult education and human resource development* (6thed). Burlington, MA: Elsevier
- Lambert, L. M., & Ruiz, M. L. D. (1988). College Courses in High School--Implications for Enrollment Management. *College and University*, 63(2), 140-147.
- Leppel, Karen, Mary L. Williams, and Charles Waldauer. (2001). The Impact of Parental Occupation and Socioeconomic Status on Choice of College Major. *Journal of Family and Economic Issues* 22:373-394.

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). San Francisco: Jossey-Bass

McMillan, J., & Western, J. (2000). Measurement of the socio-economic status of Australian higher education students. *Higher Education*, 39(2), 223-248.

Sanders, N. F., & Poynter, D. J. (1989). The local economy and the adult learner enrollment behavior: does a relationship exist? *College and University*, 64, 356-366.

Zanariah A. Rahman, Ishak Md. Shah & Nazihah Omar. (2012). The relationship of Emotional Intelligence on Students Performance. *World Journal of Social Sciences*. Vol. 2. No. 3, pp. 201-208