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Foreword

The new issue the National Journal Education Development is another platform for national scholars and researchers to share their ideas and findings in the broad aspect of education. Guided strongly by liberalism in education philosophy, we have covered a wide range of topics or areas and research reports in this first issue. Ranging from distance learners to program planning, and from learning strategies to students behavior. We welcome scholars from all kinds of organization to share their views and work with the journal as well as with a wider community of critical readers, educators, program planners and practitioners in these areas.

In line with the new concepts, developments and challenges in education, an educator is no longer relevant with obsolete ideas but they are required to update their ideas, methods and technologies to warrant meaningful learning outcome. This journal published latest ideas and findings in helping the educators to update their knowledge and skill in this area.

Besides discussing purely about education, we have also included two articles on methods of effective interviews and online shopping behaviors among adult learners. These topics made this journal a unique issue that is believed to attract more scholars and readers to access this journal.

Institute of Education Development (InED)

Universiti Teknologi

MARA (UiTM) takes pride in its academic centres and numerous branch campuses in the various states in the country. The Institute of Education Development (InED) is one of the academic centres in UiTM that provides opportunities for those who wish to pursue their academic objectives.

The Institute of Education Development (InED) was formed in September 2001. InED now manages three types of programmes concurrently: the Distance Education Programmes, Collaborative Education Programmes and Continuing Education Programmes.

DISTANCE EDUCATION PROGRAMMES

The objective of these programmes is to offer continuing education to upgrade the knowledge and career of Bumiputras. They also help to increase productivity and contribute to national development.

COLLABORATIVE EDUCATION PROGRAMMES

The main aim of these programmes is to provide opportunities for qualified Bumiputera students who do not have the opportunity to enter public universities to further their education in private colleges.

CONTINUING EDUCATION PROGRAMMES

The Centre for continuing Education (CCE), established in 2002, emphasizes the utilization of Universiti Teknologi MARA's (UiTM's) human and structural capital for enhancement of knowledge. These programmes are offered to the public.

Factors Affecting Performance Of Adult Learners Of Diploma In Accountancy Universiti Teknologi MARA

Anisah Mahmood

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Abstract

Adult learners are self-supporting, mature, responsible, and lead lives as independent citizens with family and career responsibilities. They are generally self-directed and interested in an institution that has the flexibility in delivery and course requirements. The objective of this study is to identify factors that affect the performance of students of diploma in accountancy (E-PJJ). Various demographic variables were identified namely gender, age, marital status, work background, and income level. Additionally, academic variables were also included namely attendance in seminars, test attendance and submission of assignments. Finally, variables representing the web activities such as participation in the course forum, e-mailing the facilitators, and use of the web resources were also analysed. The findings indicated that the factors affecting the performance of adult learners can only be predicted by looking at the number of assignments submitted, and the number of additional reference materials used. Neither the demographic variables nor the academic activities variables could be the predictors or factors. Thus, for the adult learners to perform or succeed, their efforts taken and commitments are vital.

Introduction

Adults, now constituting approximately half of the higher learning institution population are typically self-supporting, mature, responsible, and lead lives as independent citizens with family and career responsibilities. Adult learners are generally self-directed and pragmatic and they differ in their perspective on the college experience from students of the traditional college age whose main task is preparing for adulthood (MacKinnon, 1994).

In past generations, because of restrictions of chronological age and social time, college education was generally not available to those who missed the opportunity at the age of 18. To some degree, adult learners are still regarded as 'off-time' by society and need to adjust to institutions that frequently imply that a college education is the property of 18 to 22 years old. The impact of the restrictions of social time is however lessening with the acceptance of the blended life plan that integrates work, education, and leisure continuously throughout the life span that grants permission for continuous life long learning for all adults.

Adult learners can be encouraged to be more self-directed. This is because learning has to be done by the learner. Adult learners must be more than passive recipients of instruction, they must assume responsibility for their learning and exercise choice over what is to be learned, as well as how to do and when to do it.

Adult learners, who are engaged in multiple life roles and often in transition, are mostly interested in an institution that has flexibility in knowledge delivery and course requirement. This is the reason why many of them choose the distance learning programme to pursue their academic success.

According to White (1997), in language learning, the issue of autonomy is of central importance to distance learning. Prior experiences of conventional classroom learning do not automatically equip distance learners with the self-knowledge required to tackle the requirements of studying in a self-instruction context. Distance learners need to make greater use of meta-cognitive strategies compared to classroom learners, most notably with regard to the strategies of self-management and advance organization and, to a lesser extent, revision. Their ability to adapt and react to the new learning environment and its challenges is crucial to ensure their success in completing the programme.

Enrollment of most distance education programmes have been seen an increased. The student population worldwide is now more mature than before. More and more adults are going back to school and joining in the academic pursuit side by side with their younger classmates. These adults are picking up where they left off from school earlier for economic reasons to find jobs. One of the most popular alternatives for them to resume learning is through the distance education programmes offered by both public universities and private colleges.

The advent of the internet age and the use of modern telecommunications have made it possible for learning to take place even across remote distances. It has made communication faster and easier. Students are able to exchange comments, ask questions and get replies via forums, as well as e-mail the assignments to their facilitators.

In the United States, distance education programmes enroll an average of 20,000 students in the year 2000. This represents 5% of their adult population. In Europe the numbers are impressive. It seems that in modern societies, it is an accepted trend where it is common for adult to continue their study.

In Malaysia, most of the public universities have distance programmes and statistics show the enrollment figures are as high as their full time students. The popularity of distance programmes is largely due to their flexibility. The adult learners do not have to leave their employment to study and that the programmes are usually conducted during the weekends.

The distance education in Malaysia is placed under the helm of the Ministry of Higher Education. Recognizing the growth and popularity of the distance education and realizing the need for some benchmark and guideline, the Malaysian Association of Distance Education was established in the year 2000. The association's main objective is to enhance public awareness towards distance education and also to promote the professionalism and research in distance education.

For Universiti Teknologi Mara (UiTM), the distance education program initially began in 1990. These distance education programs are commonly called 'PJJ' and are basically correspondence programmes. The program then added the electronic feature when the first batch of 'e-PJJ' students enrolled for the program in 1999.

In UiTM, the course delivery of the distance education programme is carried via online through the web materials posted in the e-PJJ portal. Additionally there are four seminars consisting of two hours sessions where students get to meet the seminar facilitators and their fellow course mates. The seminars are normally scheduled for once a month for each subject. The students are assessed based on the continuous assessments marks and final exam marks. Continuous assessments marks are based on the scores in one or two tests given during one of the seminars and the marks of either two or three assignments for each subject. Finally this continuous assessment is added to the marks obtained in the final exams to determine the final grade for the student. On average, the adult learners normally take three subjects in a semester.

Theoretical Framework

The central issues of this study are the adult learners' performance and the factors affecting their performance. The performance is the dependent variable. The independent variables identified are the academic activities and web activities. The performance is measured based on the Cumulative Grade Point Average (CGPA) of the students.

The academic activities are represented by issues like attendance for seminars and tests, submission of assignments and consultation with lecturers. The web activity is represented by the frequency of accessing the e-PJJ portal. It theorized in this study that independent variables would be an important factor affecting the adult learners' performance. This means that the CGPA gained by the adult learners is the outcome or the product of the web activities and academic activities.

Problem Statement

Study of the adult learners in Malaysia is relatively a new field. Of late not many researches have indulged on factors affecting adult learners' performance, as researches normally focus on the full time students. This may be due to the fact that majority of the students population in the country in the undergraduate level is relatively young. However we must not forget that the trend is slowly changing and that we may soon find that our student population in colleges and universities around the country are getting older as those in the developed countries. In the United States for example, half of the college population are adult. The increased importance of this group of learners has lead to recognizing them as an untapped market segment for universities and colleges. Universities and colleges have been seen to make serious efforts to enhance their image to attract these adult learners enrollment.

At the same time with the trend towards enhancing the marketability of public universities such as UiTM, the potential of distance education programmes must not be taken lightly. As such UiTM has invested substantially into the infrastructure needed for such programmes. It is important that we look into what we can do to improve the satisfaction of our adult learners as well as the success rate of the adult learners and hence compete with other e-PJJ programmes. This is why studies such as this are important because we need to know the qualities they must have and also inculcate, to ensure their success in distance education programmes. Findings from this analysis may be used by administrators to advice the prospective students during admission and selection of courses.

Additionally, during the semester, learning facilitators can also use the input gained from this study to perform their role as facilitator and advisors to the students during the semester.

Furthermore we must not make the mistake of using pedagogical theories and principles when dealing with adult as they are a truly different group of learner from our usual fresh from school teenager who are enrolled in the full time programmes. We must acknowledge that they are more matured and should treat them accordingly.

It is hoped that findings can somewhat improve the overall performance of adult learners in the Diploma in Accountancy (DIA) flexible learning programme , reduce the drop out rate of the adult learners in this programme, and also enhance the attractiveness of the DIA programme to prospective adult learners.

Objective of the study

This study proposes to look at the performance of adult learners specifically in the Diploma in Accountancy distance education programme in UiTM. The final exam results as shown by the individual courses' grades and the overall semester grade as shown by the Cumulative Grade Point Average (CGPA) will be analysed.

The analysis will look into performance in general for the adult learners and will attempt to profile the adult learners in terms of the results obtained and their demographic profiles that are gender, age, marital status, working background, income level and working experience. Demographic background of adult learners will be tested whether they significantly affect their performance. In detail, the performance of adult learners within demographic groupings will also be examined such as comparing the performance of male and female students and performance of adult learners from different income level etc.

Secondly, the study will also look at the academic participation defined as the activities undertaken by students with respect to the courses such as tests and seminar attended, and assignments submitted. These constructs will be tested against the adult learners' performance to determine if there is any relationship between the factors above and adult learners' performance.

Finally, the extent and existence of web participation as measured by contact with facilitators and use of web materials and consultations with seminar and learning facilitators via internet will also be compared to determine existence of relationship with performance.

Research questions

Specifically, in conducting the study on adult learners (AL), the research questions addressed are:

General and Demographic

1. How is the performance of female AL compared to male AL?
2. Does AL performance differ according to marital status?
3. Does AL performance differ according to income level?
4. Does AL performance differ according to work experience?
5. Does AL performance differ according to work background?

Academic activities

1. Is AL performance related to their attendance in seminar?
2. Is AL performance related to their attendance in tests?
3. Is AL performance related to their submission of assignments?
4. Is AL performance related to possession of additional course materials?
5. Is AL performance related to method of study used by them?

Web activities

1. Is AL performance related to their frequency of connection to course forum?
2. Is AL performance related to their frequency of web communication with facilitators?

Literature Review

Definition and meaning of adult learners

Adult learners are defined as learners who have self-concept, self-responsibility and are capable of making decisions, not led by others. Their life experiences form valuable learning resources and they need to know how to relate learning to life activities. They are ready to learn based on the need. (Knowles, 1973, 1990)

Verner (1964) as cited in Man (2002) reminds us that adulthood is more than the simple passing of a prescribed age-barrier, since the age at which individuals reach psychological maturity differs. He pointed out that the responsibilities reserved for adults include such things as being economically self-sufficient, a spouse, a parent, and an active citizen. Not only are these roles immediately productive, they introduce a continuous sequence of new tasks for which pre-adult learning is never adequate preparation. Therefore continuous learning is necessary.

Liveright and Haygood (1969) as cited in Man (2002) defined adult education as a process whereby persons undertake sequential and organized activities with a conscious intention of bringing about changes in information, knowledge, understanding or skill, appreciation and attitudes; or for the purpose of identifying and solving personal and community problems.

Distance education and e-learning

Distance learning or remote learning or open learning are some of the terms used interchangeably with distance education. Feasley, Perry and Rumble (1987) and Keegan (1990) have comprehensively defined the term distance education as having five criteria. First, the student and instructor are separated geographically. Second, there is a body or entity involved in the administration of the activity. Third is the use and application of information technology in the production of course materials and the carrying out of the programme. Fourth, the existence and the use of two-way communications between the instructor and students, and lastly the fifth criteria, there are sometimes face-to-face meetings.

According to Moore (1996) and Froke (1994) distance education consists of all arrangements for providing instruction through print or/ and electronic media to persons engaged in planned learning in a place and time different from that of the instructor. As a result, it requires special techniques of course design, special instructional techniques, special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements.

Various definitions of distance education included that distance education is the delivery of course content and instructional materials where the instructor and student are separated geographically.

Academic performance

Previous researched on academic performance of adult learners have looked at its relationship with a variety of factors. One study focused on the student's performance in comparison to those students' study preferences. This study by Jegede, Taplin, Fan and Chan (1999), that compared high achievers and low achievers responses in a survey measuring among other things; study experience, study habits and use of the e- learning tools. The results showed that there were come significant difference between the high and low achievers in terms of the above experiences and habits.

Biner, Barone, Welsh and Dean (1997) tried to determine the relation of academic performance with student's satisfaction with the interactive telecourse. This study findings showed that higher satisfaction were consistent with high academic performance.

The Malaysian study carried out by Marziah et.al in 2002 on adult learners focused on academic performance by comparing between full time students who are usually young students and the distance learners who are mostly mature students. Their findings showed that there were no significant differences between the two groups. This was surprising since there was an assumption that the students in the full time tended to do better than their e-learning mode counter part. Additionally this finding contradicted with the previous study by Harvey et al (1997), Scheer (2000) and Richardson (1997) that looked at performance of mature and young students. The latter study had found that performance differed according to age and favoured the matured students.

Another local study on adult learners by Nor Aziah et al (2002) identified four drop out factors which are academic factors, personal factors, responsibility factors and study environment. This study however was conducted on non-accounting students.

Research Methodology

Research design

To achieve the research objectives outlined in the proposal, the research design is based on the collection of data through survey matched with the academic results of students who participated in the survey. The survey questionnaire was administered from February to June 2004 in two stages. This study was carried out at UiTM Shah Alam campus.

Questionnaire design

The survey questionnaire contained 20 questions divided into three sections that are demographic questions, questions related to academic activities, study methods and questions related to web participation.

The first section contained queries regarding demographic factors such as age, marital status and working background. The second section contained queries regarding academic activities as shown through assignments sent and seminars attended. The respondents were required to include their student matrix number to enable the researcher to identify their academic results for the data analysis purposes.

In addition to the input obtained from responses in the questionnaire, the other crucial data is the academic results of the adult learners' students. The student's cumulative grade point average (CGPA) is used to represent adult learners' performance. The use of CGPA is an acceptable measure as it has been used in prior researches on academic performance done by Knowles (1980), and Marziah et.al (2002).

Population and Sampling

The population in this study is the students who enrolled in the Diploma in Accountancy flexible learning program. This programme is carried out only in the Shah Alam campus. The population consisted of 129 students. A total of 120 questionnaires were distributed

to the students during the seminar and 82 questionnaires were returned to the researcher. This meant a response rate of 68%.

As the survey instrument is newly developed, a factor analysis test was carried on the instrument, specifically to test the variables. The test results showed that the components identified from the instrument were different from one another. The web participation variable is distinct from the other variables that are the academic activities and demographic factors.

Data Analysis

The quantitative analysis included descriptive and statistical analysis. The data obtained from the survey was analysed using Statistical Package for Social Science (SPSS) version 10. The following tests were chosen to test the hypotheses outlined:

1. Test of means-independent samples
2. Chi square
3. Correlation

Hypotheses Development

The study carried out focused on the development of several hypotheses. These hypotheses were built upon the performance of the adult learners in the Diploma in Accountancy flexible learning program. Various demographic variables were identified namely gender, age, marital status, work experience and background, and income level as the contributing factors to adult learners' performance. Additionally, academic variables were also included namely attendance in seminars, test attendance and submission of assignments which could also be the contributing factors to the adult learners' performance. Finally, as the population consists of the flexible learning program or the e-PJJ students, as they are commonly called, there are also variable representing the web activities of the adult learners. The variables are participation in the course forum, e-mailing the facilitators and use of the web resources.

The hypotheses that were tested are as follows:

- H1 AL Performance is related to gender.
- H2 AL Performance is related to marital status.
- H3 AL Performance is related to age.
- H4 AL Performance is related to work background.
- H5 AL Performance is related to years of working experience
- H6 AL Performance is related to income level.
- H7 Academic activities - attendance in tests is a factor that affects AL performance.
- H8 Academic activities - attendance in seminars is a factor that affects
AL performance.
- H9 Academic activities - submission of assignments is a factor that affects
AL performance.

- H10 Academic activities - use of additional reference materials is a factor that affects AL performance.
- H11 Academic activities - group study or individual study is a factor that affects AL performance.
- H12 Web activities - Forum participation is a factor that affects AL performance.
- H13 Web activities - Communication via the internet is a factor that affects AL performance.

Data Analysis And Findings

Characteristics of respondents

The characteristics of the respondent are shown in table 1 to table 11 according to the following classifications:

- Gender
- Marital status
- Age
- Working experience
- Working background
- Income level
- Attendance in seminars
- Test attendance
- Submission of assignments
- Participation in the course forum
- Use of website resources

Classification of respondents by:

Table 1: Gender

| Gender | Frequency | Percent |
|--------|-----------|---------|
| Male | 29 | 35.4 |
| Female | 53 | 64.6 |
| Total | 82 | 100.0 |

From the above, majority of the respondents are female which represent 65% and the remaining are male respondents.

Table 2 - Marital status

| Marital status | Frequency | Percent |
|-----------------------|------------------|----------------|
| Single | 42 | 51.2 |
| Married | 40 | 48.8 |
| Total | 82 | 100.0 |

Most of the respondents are single which represent 51.2% compared to married respondents 48.8%.

Table 3 - Age

| Age | Frequency | Percent |
|------------|------------------|----------------|
| < 25 | 23 | 28 |
| 25 - 35 | 50 | 61 |
| 36 - 40 | 8 | 9.8 |
| > 40 | 1 | 1.2 |
| Total | 82 | 100.0 |

Majority of the respondents aged between 25 – 35 years and this indicated that they were working adults who seek knowledge for self satisfaction, promotion with a hope to earn better income and life.

Table 4 - Working experience

| Working experience | Frequency | Percent |
|---------------------------|------------------|----------------|
| < 2 yrs | 9 | 11.0 |
| 2 – 5 yrs | 33 | 40.2 |
| > 5 yrs | 39 | 47.6 |
| Total | 81 | 98.8 |
| Missing | 1 | 1.2 |
| 82 | 100.0 | |

Majority of the respondents in this study do have five years and more experience in working and this result supported the evidence why majority of them fall in the aged group of 25 -35 because they realized that they are now financially stable and do have enough money now to pay the tuition fees and are still not too late to further study.

Table 5 - Working background

| Working background | Frequency | Percent |
|---------------------------|------------------|----------------|
| Public sector | 23 | 28 |
| Private sector | 50 | 61 |
| Own business | 8 | 9.8 |
| Others | 1 | 1.2 |
| Total | 82 | 100.0 |

Most of the respondents in this study work in the private sector (61%) and only 23% work in the public sector. This is because working in the private sector offers more income and they can enjoy other benefits such as overtime claims for working extra hours, allowances, mileage claims, etc compare to public sector (governments).

Table 6 - Average monthly income level

| Average monthly income | Frequency | Percent |
|-------------------------------|------------------|----------------|
| <1,000 | 24 | 29.3 |
| 1,000 – 2,000 | 47 | 57.3 |
| 2,001 – 3,000 | 5 | 6.1 |
| > 3,000 | 5 | 6.1 |
| Total | 81 | 98.8 |
| missing | 1 | 1.2 |
| | 82 | 100.0 |

From the above table, it can be observed that most respondents earn an average of RM1,000 – 2,000 per month (57 %) and only 12% earn more than RM2,000 whilst 29% earn below RM1,000.

Table 7 - Attendance in seminars

| No of attendance | Frequency | Percent |
|-------------------------|------------------|----------------|
| None | 3 | 3.7 |
| 2 – 3 seminars | 15 | 18.3 |
| 4 seminars | 63 | 76.8 |
| Total | 81 | 98.8 |
| missing | 1 | 1.2 |
| | 82 | 100.0 |

Regarding the attendance in seminars, majority of the respondents (77%) indicated that they attend most of the seminars i.e. all the four seminars in the semester whilst 18% indicated that they attend twice or three seminars and only 4% indicated zero attendance for the seminars.

Table 8 - Test attendance

| Test attended | Frequency | Percent |
|----------------------------|-----------|---------|
| Attended all tests | 74 | 90.2 |
| Did not attend one or more | 6 | 7.3 |
| 80 | 97.6 | |
| missing | 2 | 2.4 |
| | 82 | 100.0 |

Included in the continuous assessment of this diploma course, is the assessment of written test which need to be taken during the seminar. Regarding attendance for the written test, 90% of the respondents claim that they attend all tests for the courses that they registered and only 7% claim that they did not attend one or more test for the courses that they registered.

Table 9 - Submission of assignments

| No of assignments | Frequency | Percent |
|-------------------|-----------|---------|
| None | 2 | 2.4 |
| 1 | 1 | 1.2 |
| 2 | 24 | 29.3 |
| 3 | 54 | 65.9 |
| Total | 81 | 98.9 |
| missing | 1 | 1.2 |
| | 82 | 100.0 |

Also included in the continuous assessment of this diploma course, is the assessment of assignments of the topics covered in the syllabus. Regarding the submission of the assignments, majority of the respondents (66%) claims that, they did and submit three assignments for each course that they registered for the semester. Only 29% of the respondents indicated that they perform two assignments for the courses that they registered and 2% indicated zero or none performing of assignments for the courses.

Table 10 - Participation in the course forum

| Participation | Frequency | Percent |
|----------------------|------------------|----------------|
| Once a week | 57 | 69.5 |
| Once in 2 -3 weeks | 12 | 14.6 |
| Once a month | 3 | 3.7 |
| None | 10 | 12.2 |
| Total | 82 | 100.0 |

For this e-learning process, students have access to the web and to interact with the lecturers via the forum. Students have to use this medium as a means to ask and forward any query regarding the topics that they do not understand or to seek for further clarification or explanation. Regarding the participation of students in the forum, most of the respondents in this study (70%) indicated that they were actively involved in the forum discussion as they entered the forum once a week. Only 4% indicated that they participated in the forum once a month and the remaining 15% claimed that they participated in the forum once in two to three weeks time.

Table 11: Use of Website resources

| | Study Material in the web | | Past Years Examination Questions | |
|---------|----------------------------------|----------------|---|----------------|
| | Frequency | Percent | Frequency | Percent |
| No | 31 | 37.8 | 10 | 12.2 |
| Yes | 50 | 61.0 | 71 | 86.6 |
| Missing | 1 | 1.2 | 1 | 1.2 |
| Total | 81 | 100.0 | 82 | 100.0 |

Regarding the use of the website resources, majority of the respondents in this study indicated that they use the website information to find additional study materials forwarded by the resource person in the web (61%) and past years examination questions (87%).

Hypotheses Testing

The first hypothesis tested was relationship between adult learners' performance and their gender. For this test, it was hypothesized that gender played a role in adult learners' performance, shown by their Cumulative Grade Point Average (CGPA). In other words the researcher would like to know whether CGPA of one sex is significantly different than CGPA of the other one; whether male learners had generally higher CGPA compared to their female counterparts, or simply the other way round.

A two way independent samples t-test was done. If it was found to be significant, then a one-tailed test would subsequently be needed to test the direction of the relationship.

The resulting p-value was 0.657, so the null hypothesis of no difference was not rejected. It could therefore be concluded that there was no significant difference between the performance of male and female adult learners. Performance was not dependent on gender.

The second test was done to see whether there was a significant difference in CGPA between those who were married and those who were not. Again an independent samples t-test was done with the null hypothesis of no significant difference in CGPA between the two groups of AL. The result showed a p-value of 0.511, and null hypothesis was not rejected. There was not enough evidence to conclude that performance of married adult learners was different from those who were not. Marital status was therefore not a factor in adult learners' performance.

The third hypothesis tested was on another demographic factor, age. It was grouped into four groups, less than 25 years old; 25 to 35 years old; 36 to 40 years old; and above 40. For the analysis, the last two groups had to be combined to have a better number respondent in the group. With Analysis of Variance (ANOVA), the hypothesis tested was that there was no difference in adult learners' performance among all three groups of age range. The significance value was 0.674, in support of the null hypothesis. So it was concluded that age was also not a factor in the performance of adult learners.

The adult learners are doing the course on part-time basis because most of them had full-time jobs, either working in the public sector or in private companies. These two sectors are quite different in some ways, prompting the researcher to test whether the performance of the students were also different.

An independent samples t-test was done to see whether there was a significant difference between the CGPA of students from the public sector and of those from the private sector. The significance value was a very high 0.970. It could therefore be confidently concluded that there was no significant difference, and that the students work background is definitely not a factor in their performance.

An even higher significance value was found for the next test. The ANOVA test was used to see whether working experience was a factor. The respondents had been grouped into three ranges, less than 2 years, 2 to 5 years; and more than 5 years of experience. The significance value was 0.989, and the null hypothesis that the mean CGPA of all three ranges were the same was not rejected. It was then concluded that working experience was also not a factor.

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An even higher significance value was found for the next test. The ANOVA test was used to see whether working experience was a factor. The respondents had been grouped into three ranges, less than 2 years, 2 to 5 years; and more than 5 years of experience. The significance value was 0.989, and the null hypothesis that the mean CGPA of all three ranges were the same was not rejected. It was then concluded that working experience was also not a factor.

In both the private and public sector, monthly income generally correlates positively with working experience. It could therefore be suspected that a test on income level would also yield a high significance value.

But in this instance it was not the case. Even though it was not small enough to reject the null hypothesis of no difference, the significance value was a low 0.156. The ANOVA was used on the hypothesis that the mean CGPA was the same for the three groups of monthly income, less than RM1000; RM1000 to RM2000; and more than RM2000. Income level was nevertheless also found to be not a factor in adult learners' performance.

After the demographic factors, the next section focused on academic activities of the students. The general intention was to see whether the students' behavior in relation to academic activities is related in any way with their academic performance. Factors tested were attendance in tests, attendance in seminars, submission of assignments, use of additional reference materials, study habit, forum participation and use of internet communication.

The first test done in this section was on attendance in tests. Performance was tested for significance difference between those that never failed to attend tests, and the other who missed one or more tests. The independent samples t-test gave a significance value of 0.378. There was no evidence to show that the mean CGPA of the two groups were different.

Next was ANOVA, testing on the difference among the different levels of frequency in contacting the facilitators. There were four different levels, namely frequent (more than 3 times), sometimes (2 to 3 times), seldom (once in the semester), and never. The result showed a significance value of 0.144, not low enough to reject the hypothesis of no difference. Frequency of contacting the facilitators was also not a factor in determining academic performance of adult learners.

ANOVA was again used for the next test. This time it was used to test the following null hypothesis that there was a difference in mean CGPA among the different frequency in the submission of assignments.

There were four independent groups concerned; those who had submitted 3 assignments, 2 assignments, a single assignment, and none. The ANOVA test showed a significance value of 0.000, a highly significant test. The mean CGPA of the groups were significantly different. Unfortunately post hoc tests could not be performed because of the limitation in the number of cases in at least one of the groups.

To confirm, group 2 and 3, the two groups which had the most number of cases, were selected and subjected to a t-test. The hypothesis in question was that the mean CGPA between the two groups were not significantly different. The test again yielded a significance value of 0.000, concluding that the mean CGPA between the two groups were different. There was a difference in academic performance between those who submitted 3 assignments, and those who submitted 2 assignments.

The result of the previous test made it more interesting to see the next test, which was to see the existence of linear relationship between CGPA and the number of additional reference material used. This time, a simple Pearson correlation test was used to test the hypothesis that there was no correlation between the two figures.

Descriptively, the r value was only 0.278, showing a low linear correlation between CGPA and number of additional reference materials used. It could therefore be suspected that those who used more additional materials for references scored better academic results.

This was proven by the hypothesis testing on the values of r where the resulting significance value was 0.021. Adult learners' academic performance was positively related to the number of additional materials used.

The last three tests focused on their way of study, forum participation and communication with the facilitator via the internet.

All the above three tests done were all non-significant. Test on study habit (in group or individually) gave a result of 0.304, while tests on forum participation and internet communication gave results of 0.393 and 0.213 respectively. All the three factors were not significant in relation to academic performance of adult learners.

Conclusion

The entry into higher learning education is a major turning point for many adults. This is a transition that potentially can change the life course and has short-range and long-range implications. Clarification of goals, expectations, success and the meaning of education are central to the persistence of adult learners. They must believe strongly that education can provide the pathway to those goals (MacKinnon, 1994).

The findings from this research indicated that the difference in performance (CGPA) among adult learners can only be predicted by looking at the number of assignments submitted, and the number of additional reference materials used.

None of the demographic variables could be predictors. So were other academic activities (attendance in tests, attendance in seminars, and study method) and web activities (forum and web participation).

Number of assignments submitted and number of additional reference materials could be showing the amount of efforts taken by the adult students. While all other variables tested were insignificant, these two could also be concluding that all it takes to succeed is commitment on the part of the students.

Difference in performance (CGPA) among adult learners can only be predicted by looking at the number of assignments submitted, and the number of additional reference materials used.

Limitations And Future Research

This study is not a representative of the overall view of adult learners in terms of the factors affecting their performance due to the low responds rate. If this research is carried out consistently throughout the semesters, other variables that influence the performance of adult learners may be identified. Further research on this area should be carried out for other e-learning programmes in the Universiti Teknologi Mara and also other higher learning institutions.

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