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EXAMINING THE EFFECTIVENESS OF LIFELONG LEARNING PROGRAMME ON THE LEARNERS: A WAY FORWARD TO POLICY RECOMMENDATION

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ABSTRACT

In line with Vision 2020, University of Malaya has established a Centre of Continuing Education (UMCCeD) in Malaysia. UMCCeD offers Executive diploma in the areas of Management (Administration and Operations), Management (Human Resource), Management (Business), Accounting Administration, Early Childhood Education, Counselling, Information Technology, Shariah Studies and Usuluddin Studies (Al-Quran and Al-Hadith studies). The programmes are designed to enhance the skills and knowledge of the working community, career advancement and motivation towards their jobs. This study aims to explain how far the programmes have achieved their objectives and learning outcomes. A survey was conducted to understand the present status of the programmes offered at UMCCeD in the areas of programme objectives, outcomes, effectiveness and overall quality. Data from a total 2421 respondents were analysed. Results show that the programme objectives are partially achieved as some of the important objectives such as salary increase, and promotion are not at expected level. The mean value shows the high level of achieving programme outcomes and quality. There was no significant difference between male and female in terms of learning outcomes. ANOVA test shows that income level has influence on learning outcomes. Course effectiveness also significantly differ among different income groups $F(n1= 4, n2= 2416)$, $p < .05$. Result shows that learning outcomes are strongly, positively and significantly correlated to programme effectiveness ($r=.657$, $P<0.01$) and programme quality ($r=0.582$, $P<0.01$). The findings can contribute to making a robust lifelong learning policy for UMCCeD and thus benefit the life-long learners.

Keywords: **Lifelong Learning Programme, Programme Outcomes, Programme Effectiveness, Programme Objectives, Programme Quality**

INTRODUCTION

UNESCO introduced the idea of Lifelong Learning with the mandate of encouraging adult learning, continuing education, literacy and non-formal basic education. The purpose was to further educational equity for disadvantaged groups and in the countries most afflicted by poverty and conflict. Their main objective is to use the power of education in creating inclusion, equity and sustainability amongst all nation, and thus eradicating extreme poverty and encouraging quality of life by the year 2030. Besides that, UNESCO also encourage Lifelong Learning to prepare mankind towards the being of a sustainable people, so that they would be able to inherit the sustainable economy, ecology and environment the present time is aiming to achieve for the future. Sustainable people depict a people that would be able to cope with the constant changes that occurs in their environment; to understand, adapt to, manipulate and create change to the future they live in. With the rapid change in the global scene, every nation is expected to be versatile and adapt to the change and demands in the trends of the market and the change of the environment, in order to rise above the situation and respond accordingly. Hence, lifelong learning champions the idea that learning is undertaken throughout life, with the aim of improving knowledge, skills and competence, with a personal, civic, social and employment -related perspective (ESAE, 2007).

Lifelong learning programmes are designed purely for adults who are seeking opportunities to flourish themselves for better career, status and economic enhancement. These programmes are offered into full time and part time basis. As adults generally have numerous responsibilities such as occupation and family, most are more comfortable with the part-time option (Lieb, 1991). Part-time learning provides both space and opportunity for working adults to continue their learning. It is known that the learning process in adults and children differ; adults tend to know what they are learning and what they want to learn compared to children who are fond of just accumulating as much knowledge as they can. Adult learning places greater emphasis on practical knowledge and skills that would be useful at the workplace. Such learning also enables personality enhancement, critical thinking, professionalism, and development of different disciplines in life, culture and lifestyles (Sufean, 1993). Abd. Ghafar (2003) also supports the notion that one's interest in studying is influenced by encouragement, motivation and one's own basic skills. The level of motivation becomes an important factor in moving, creating, maintaining and exercising control over one's interest. Meanwhile, basic skills would prepare one, especially an adult learner, to acquire new learning skills. In the words of Manuel London, "Learning can bring about change by creating new capabilities and opening the door to new and unexpected opportunities" (London, 2011). Deci and Ryan (2000) explains that individuals behave in certain ways either because they want to, or because they have to. Radovan (2010) also expounded on Boshier's thesis and agreed that intrinsic motivation and autonomy are seen as an ideal from the educational perspective. While it is important to look at the individual factors in this motivation, sociologist such as Desjardins, Rubenson, and Milana (2006) and Desjardins (2015) also showed a strong emphasis on lifelong learning as a means to let adults climb the social ladder through social mobility. Gorard (2009) and Kyndt and Baert (2013) also show the relation of different individual societal situation in determining the motivation of participation towards lifelong learning. Furthermore, researchers by Schuetze and Slowey (2002), Fuller and Unwin (2011) and in Malloch et al. (2011) also showed the correlation between the education institution and an individual's motivation to engage in lifelong learning. Lastly, research has also shown the factor of the macro-sociological and political perspective in the determining of an individual's decision in lifelong learning. This is observed as different nation has its different national systems and regimes, each with different effect to the individual's decision making process (Desjardins, 2015; Dammrich, Vono de Vilhena, and Reichart, 2014; Blossfeld et al., 2014). In an effort to piece the three levels of systems which holds the potential in motivating participation amongst lifelong learners, Boeren (2017) introduced an interdisciplinary lifelong learning participation theory, which uses a multi-layered analysis in probing into this study. Lieb (1991) states that motivational elements that exist in an individual are caused by several factors which comprise intentions to become an efficient and organised person in the workplace, obtain promotions, adaptability at a new workplace and willingness to learn and seek new experiences.

Azura Azilah (2008) believed that motivation in work is also a product of new activities being introduced in an organisation. In her studies related to the implementation of ISO at University Malaya, she discovered that the implementation of the evaluative tool did not affect the motivation and work spirit of many academics; however, it did enable them to organise their time efficiently and enhanced their skills, especially in self-management and organisation. Norlia, Subahan, Lilia, and Kamisah (2006) found that adopting a proper and suitable learning style enabled students to achieve tremendous results while at the same time instilling in them the motivation to be competitive. Within this context, learning full time gives opportunities for higher achievement since there is no other commitment. Even then, adult learners do face various obstacles and responsibilities which need to be considered, part-time students, on the other hand, have a responsibility to be dutiful workers during weekdays and play the role of students over the weekend, and this needs effective time-management. With the growing demand, many public and private universities and institutions offer different part time programmes for the adult learners and thus the number of programmes has increased worldwide since last few years (Moore & Kearsely, 2005). In developed countries where the percentage of older adults is larger (World Economic Forum, 2012), lifelong learning is important in ensuring and enhancing the well-being and quality of life of the aging population. As a result, while lifelong learning has been introduced in the United States, Europe and Australia in 1980-90s, it is a recent emphasis in Malaysia to move towards knowledge-based economy with a view to becoming a developed nation by the year 2020 (Mustapha & Abdullah, 2006; Su-Hie Ting et al., 2015). The sixth thrust of the National Higher Education Strategic Plan (NHESP) 2020 is enculturation of lifelong learning (Su-Hie Ting et al., 2015). In line with Vision 2020, University of Malaya has established a Centre of Continuing Education (UMCCeD) in Malaysia. With many other programmes, UMCCeD offers Executive diploma in the areas of Management (Administration and Operations), Management (Human Resource), Management (Business), Accounting Administration, Early Childhood Education, Counselling, Information Technology, Shariah Studies and Usuluddin Studies. In order to enhance the skills and knowledge of the working community in their respective areas, the Executive Diploma programmes are specially designed and developed. UMCCeD programmes are designed in light of current and future needs and marketability of the country which introduce, develop, and reinforce academic and occupational knowledge, skills and attitudes required for job acquisition, retention and advancement (UMCCeD, 2020).Curriculum and teaching materials of all these programs are developed by professors and lecturers who are recognized expert in related areas. The method of class deliveries varies from lectures to seminars, workshops, case studies, multimedia presentation, small group discussion and webinars to facilitate effective learning (UMCCeD, 2020).

The ultimate purposes are their career advancement and motivation towards their jobs. Since there is less evidence of conducting study to investigate the strength of all these part time programmes, especially their impact on motivation and organisational skills, this study is initiated to explain the level of achievement of the effectiveness and outcomes of these programmes. The following objectives are set to achieve the purposes.

RESEARCH OBJECTIVES

The purpose of this study is to describe the scenario of present practices of life- long learning programmes and to examine the effectiveness and outcomes of these programmes among part time students at UMCCeD. In order to achieve the purpose, the following objectives are formulated:

1. To identify what extent programme objectives are achieved
2. To identify the present status of programme learning outcomes at UMCCed
3. To identify the present status of the effectiveness of academic system at UMCCed
4. To identify the overall quality improvement of the programme
5. To identify whether programme learning outcomes and effectiveness differ based on gender difference
6. To find whether programme learning outcomes and effectiveness differ based on different job status
7. To find whether programme outcomes and effectiveness differ based on different income groups

8. To determine the degree of relationships between Programme learning outcomes, school effectiveness and quality improvement

METHODS AND MATERIALS

Research Design

This was a survey conducted to understand the present status of the programmes offered at University of Malaya Centre of Continuing Education (UMCCeD) with the purpose to recommend policies. The areas of conducting the survey were programme objectives, outcomes, effectiveness and overall quality. The purpose of using survey was to collect data from a large sample of students enrolled for Executive Diploma so that the findings can be generalized to similar conditions.

Population and Study Sample

Identifying the population which will provide feedback is important as it determines the problematic areas that need to be studied (Mohd. Majid, 2004). The population for this study comprised UMCCed students of Executive diploma programme. Students from the year 2015, 2016 and 2017 were target population and sample as well. In these three years, total 2550 students enrolled, and they were contacted through meetings in classes to respond to the prepared questionnaires. These questionnaires were then given to each head of class to be distributed to the students in the morning. Later in the evening, the technician on patrol collected the questionnaires from the classes. All together 2421 students were found correctly filled in the questionnaires of which 877 were from the session of 2015, 884 from 2016 and 660 from 2017. Thus, total respondents were 2421.

Research Instruments

Questionnaire: Self-developed questionnaires were used to collect data for the study.
This questionnaire is divided into four sections, namely:

Part A: Respondent's Profile

This section requests for information on aspects such as Programmes Taken, Gender, Age, Race, Religion, Marital Status, Educational Level, Monthly Income, Job, Employment Status etc..

Part B: Programme objectives and learning outcomes

UMCCeD has some specific objectives and expected outcomes for each programme. The questionnaire was developed in line with these objectives and outcomes. The items in this section are used to assess the level of the achievement of programme objectives and outcomes. The 5 characteristics were to check the level of achieving programme objectives by answering yes or no while 12 characteristics that contribute to programme outcome levels are listed and required to be graded using Likert scale 1 to 5.

Part C: Students' Experience at UMCCed on programme effectiveness

This section of the questionnaire is used to evaluate the effectiveness of the academic system of UMCCed. Programme effectiveness was assessed based on the students perception on programmes' quality, teachers' knowledge and quality, students' safety and satisfaction with the learning experience. The 12 characteristics that contribute to the organisational skills are listed and required to be graded using a score of 1 to 5.

Part D: Quality of the programme

This part of the questionnaire assesses the quality in terms of teaching, learning, curriculum, delivery, facilities and assessment methods. Based on five sets of opinions given, it is graded on a scale of 1 to 5.

Part E: Overall impression

This part assesses the overall impression of the students studied at UMCCed for furthering their education here in future by answering Yes or No.

For Sections B, C and D the following scale is used:

1 - Strongly Disagree
2 - Not Agree
3 - Neutral
4 - Agree
5 - Strongly Agree

Respondents are required to fill in the blanks or tick [√] against the items appropriate responses in Section A and circle the most suitable numbers in Sections B, C, and D according to the perception of the respondents. There are altogether 30 statements which are listed in the following order: Programme Learning Outcomes, Programme Effectiveness and Overall quality improvement.

A pilot study was conducted to test the validity and reliability of the questionnaire. A total of 65 UMCCeD students excluded from final study were the respondents. The reliability of the questionnaire was tested using the Cronbach Alpha coefficient test. According to Mohd. Najib (2003), the coefficient of reliability suitable for use in a survey tool should be greater than 0.60. The analysis is shown in Table 2 below.

Table 1
Cronbach Alpha Coefficient for Programme outcomes and Effectiveness

Item	Alpha (α)	Standard α	N
Programme Outcomes	0.7599	0.7708	62
Programme Effectiveness	0.8765	0.8701	63

Table B shows that the coefficient for Programme Outcomes was 0.76 (n = 62) and that for Programme Effectiveness was 0.88 (n = 63). Thus, this instrument could be used because the Cronbach Alpha coefficients for both variables exceeded 0.60.

Data Collection

Two main locations were chosen, namely Wisma R & D centre and City Campus, both institutions belong to the University of Malaya. The data collection was carried out in the evening by the technician on duty for the week. The class leaders took two weeks to collect and compile the data. The roles and functions of the class leaders for this exercise were identified with the help of the programme coordinator. The forms that were collected were numbered for review purposes to ensure no irregularities.

Data Analysis

The collected data was then analysed using 'Statistical Package for Social Science' (SPSS) Version 21.0. Both descriptive and inferential statistics were used in line with research objectives. For the former, frequencies, percentages and means were used to view the information related to Section A (Profile of Respondents). Mean scores were used to evaluate the Programme outcomes, effectiveness, and overall quality. The mean score range was in between 1.00 to 5.00. For the purpose of analysis, the different minimum and maximum ranges were divided into three levels: mean scores ranging from 1.00 to 2.33 were classified as low level, 2.34 to 3.67 as moderate and 3.68 to 5.00 as high (Mohd Majid, 2004).

For the inferential analysis, the 't-test' was used to determine the mean differences between males and females as regards Programme outcomes and effectiveness. The 't-test' analysis was used to test the null hypothesis (H_o) with a significant level of $p \leq .05$ with 95% confidence level.

The Pearson correlation method was further used to examine the relationship between Programme outcomes, effectiveness and quality. This test was conducted on the significant level of $p \leq .05$ with 95% of confidence level. The correlation strength (Table 1) was based on the Rowntree (1981) scale, that is:

Table 2
Correlation Strength & Strength Classification

Range (+ or -)	Strength
0.0 to 0.2	Very weak
0.2 to 0.4	Weak, low
0.4 to 0.7	Medium
0.7 to 0.9	Higher, stronger
0.9 to 1.0	Very high, very strong

Rowntree, D. (1981) Statistics without Tears: a Primer for Non-Mathematicians. London.

RESULTS

Respondents' demographics

Table 3
Respondents' Demographic

Income	F	%	Job status	F	%	Age	F	%
Less RM1000	701	29.0	Work (Gov)	620	25.6	27-18	797	33.0
RM 1000- RM 1500	208	8.6	Work (Private)	934	38.6	37-28	758	31.3
RM 1 501 - RM 2 000	205	8.5	Work alone	178	7.4	47-38	453	18.7
RM 2 001 - RM 2 500	265	10.9	Study (Full Time)	16	.7	57-48	304	12.6
More than RM 2 500	1042	43.0	Study (Part Time)	295	12.2	68-58	109	4.5
Total	2421	100.0	Unemployed	378	15.5	Total	2421	100.0
			Total	2421	100.0			
Respondent's Gender								
Male	905	37.4						
Female	1516	62.6						

Income

Table 3 above shows that 701 (29%) respondents' valid income is less than RM1000. Whereas 208 (8.6%) respondents' monthly income is RM1000- RM1500 and 205 (8.5%) respondents' monthly income is limited in between RM1501-RM2000. 265(10.9%) respondents are earning RM2001- RM2500. A significant number (1042) of respondents (43%) is earning more than RM2500 monthly.

Job status

The number of respondents (Table 3) on government job is 620 (25.6%) and the number of respondents on private job is 934 (38.6%). Whereas 178 (7.4%) respondents are self-employed. The table also shows that, 16 (.7%) respondents are full time students and 295 (12.2%) students are part-time students. However, 378 (15.6%) respondents are unemployed.

Age

Table 3 above shows that 109 (4.5%) respondents' age is in between 58-68 years, 304 (12.6%) respondents' age is 48-57years. 452 (18.7%) respondents are 38-47years old and 758(31.3%) respondents are 28-37 years old. The highest number of respondents, 796 (32.9%) are 18-27 years old. The table also shows that there is only 1 (.0%) respondent each from 21years and 45 years old.

Gender

Total out of 2421 (100%) respondents, 905 (37.4%) are male respondents and 1516 (62.6%) are female respondents (Table 3). The numbers of female respondents are significantly bigger than that of the numbers of male respondents. It means, most of the students studied at UMCCeD are female who choose lifelong learning to improve their career path.

Programme Objectives

Few questions were asked to verify whether the programme objectives are being achieved. Table 4 depicts all the responses.

Table 4
Achievement of Programme objectives

Questions on	Yes F (%)	No F (%)	Total
Do you work in a field related to the program you have been studying?"	1380 (57)	1041 (43)	2421
Did you get any salary increase after graduating from UMCCeD?	603 (24.9)	1818 (75.1)	2421
Have you been promoted after graduating from UMCCeD?	390 (16.1)	2031 (83.9)	2421
Are the knowledge and skills acquired from the program at UMCCeD used to improve your work efficiency?"	1980 (81.8)	441 (18.2)	2421
Would you like to pursue higher education after graduating from UMCCeD?	2051 (84.7)	370 (15.3)	2421

In response of first question "Do you work in a field related to the program you have been studying?" Out of 2421 respondents, 1380 (57%) responded "yes" and 1041 (43%) respondents answered "no". Table 4 shows that almost half of the respondents are not working in the field related to the program.

In response to second question "Did you get any salary increase after graduating from UMCCeD?" 603 (24.9%) respondents have replied "yes" whereas 1818 (75%) respondents have replied "no". So the table 4 shows that, even after being graduated from UMCCeD three-quarters of the respondents' salaries have remained unchanged.

Out of total 2421 respondents, 390 (16.1%) have responded "yes" and 2031(83.9%) have responded "no" to the question "Have you been promoted after graduating from UMCCeD?". Table 4 shows that a very few number of respondents (16.1%) have got promotion in their working place.

For answering question "Are the knowledge and skills acquired from the program at UMCCeD used to improve your work efficiency?" majority of the respondents, 1980 (81.8%) have answered "yes" and only a few responded 441 (18.2%) "no". So the table 4 shows a positive result of improving work efficiency.

In the response to question "Would you like to pursue higher education after graduating from UMCCeD?" Table 4 shows that the leading number of respondents, 2051 (84.7%) agrees. whereas a very few number of respondents (15.3%) disagrees to explore higher study.

Overall result from Table 4 shows that the programme objectives are partially achieved as some of the important objectives such as salary increase, and promotion are not at expected level.

Programme Learning Outcomes

Descriptive statistics has been used to know the level of learning outcomes of the programme studying at UMCCeD. In 5 point Likert scale, Mean range in between 1-3 refers to no outcomes, 3.1-3.9 medium level of outcomes while 4 to 5 refers to better or high level of learning outcomes.

Table 5
Status of Programme Learning Outcomes

	N	Mean	Std. Deviation	Level of Outcomes
Awareness of lifelong learning needs and the ability to do so.	2421	4.36	.635	High
Able to communicate within organizations and the environment.	2421	4.31	.608	High
Able to provide various types of documentation for work use and so on.	2421	4.13	.695	High
Able to analyse and interpret data.	2421	4.09	.677	High
Able to identify, formulate and provide creative, innovative and effective solutions to specific problems.	2421	4.14	.653	High
Showcase the features of entrepreneurial thinking or manageability.	2421	4.08	.704	High
Be able to use the skills learned at work	2421	4.17	.713	High
Seeks to apply the knowledge learned in the work.	2421	4.21	.695	High
Can discuss global issues related to the area studied	2421	4.11	.700	High
Able to interact effectively as members in the group	2421	4.24	.647	High
Able to use superior principles in design and development.	2421	4.02	.730	High
Seeks to explain professional and ethical responsibility	2421	4.23	.649	High
Valid N (listwise)	2421			

Table 5 shows that after studying at UMCCed, students level of awareness of lifelong learning needs and ability is at high level (M=4.36, SD= .635). It is also found that students are able to communicate within organizations and the environment (M=4.31, SD=.608), able to provide various types of documentation for work use and so on (M=4.13, SD=.695), able to analyse and interpret data (M=4.09, SD=.677), able to identify; formulate; provide creative; innovative and effective solutions to specific problems (M= 4.14, SD=.653) at high levels. The mean values of showcasing features of entrepreneurial thinking or manageability (M=4.08, SD=.704), being able to use the skills learned at work (M=4.17, SD=.713) and seeking to apply the knowledge learned in the work (M=4.21, SD=.695) are also at high level. Learning outcomes of discussing global issues related to the area study (M=4.11, SD=.700), effective interaction among members in the group (M=4.24, SD=.647), using superior principles in design and development (M=4.02, SD=.730), and explaining professional and ethical responsibility (M=4.23, SD=.649) are also very high. In particular, the range of standard deviation is between 0.61-0.70 shows that respondents' opinions are very close to each other.

Programme Effectiveness

Descriptive analysis has also been done to know the level of effectiveness of the programmes at UMCCeD. Mean in between 1-3 refers to Low, 3.1-3.9 medium level of effectiveness while 4 to 5 refers to better or high level of effectiveness. Table 6 shows that the mean of all the items except two is in between 4.03 to 4.37 which indicate high level effectiveness. Two areas infrastructure facilities (M=3.73, 0.899), i.e. ICT, computer and customer service (M=3.92, SD=0.832) have been identified as medium level of effectiveness.

Table 6
Programme Effectiveness

	N	Mean	SD	Level of effectiveness
The quality of academic programs and courses at UMCCED is at a high level.	2421	4.11	.694	High
Quality of teaching at UMCCED is at a high level	2421	4.13	.672	High
Teachers have a high level of knowledge	2421	4.37	.641	High
Students are exposed to the latest knowledge and skills.	2421	4.24	.649	High
Students can acquire the necessary soft skills throughout their studies at UMCCED	2421	4.17	.643	High
Infrastructure facilities such as computers / ICT are sufficient to accommodate students' needs.	2421	3.73	.899	medium
Student safety is assured throughout the learning process at UMCCED.	2421	4.06	.755	High
Overall, customer service at UMCCED is at a high level.	2421	3.92	.832	medium
I am satisfied with the learning experience at UMCCED.	2421	4.24	.671	High
The knowledge and skills of your program of study are relevant to your current job.	2421	4.12	.762	High
The designed curriculum of study is very helpful in your career.	2421	4.06	.759	High
The effectiveness of the UMCCED program on my career development is very good.	2421	4.12	.735	High
Valid N (listwise)	2421			

Quality of the Programmes

Table 7 shows that the mean value is very high in disclosure of teaching learning to career prospects (M=4.19), improved curriculum quality, delivery and assessment (M= 4.20), focussing practical skills than theory (M= 4.13) and programme delivery with current issues (M= 4.24). But the quality of field work assignments is identified as moderate level. Result shows that the programme maintains high quality.

Table 7
Programme Quality

	N	Mean	SD	Level of Quality
Disclosure of teaching and learning to career prospects.	2421	4.19	.647	High
Improved quality in terms of curriculum, delivery, facilities and assessment methods.	2421	4.20	.637	High
Provide a syllabus that focuses more on practical skills than theory.	2421	4.13	.725	High
The relevance of current issues in program delivery.	2421	4.24	.629	High
Conducting fieldwork assignments / study tours.	2421	3.98	.906	Moderate
Valid N (listwise)	2421			

Influence of Gender on Programme Learning Outcomes and Effectiveness

T-test

As it required for t-test to find the gender influence, normality test was conducted for dependent variables programme learning outcomes and Programme effectiveness. Data was found normally distributed as the skewness and kurtosis value was in the range of +1.96 to -1.96. Also Shapiro-wilks (P=0.38) and Kolmogorov-Smirnov (P=0.35) tests were found insignificant.

As data was normally distributed and only two groups, independent sample t-test was used to find gender influence on programme learning outcomes and effectiveness. The following null hypotheses were tested. If the p-value of the test result was found less or equal to 0.05 significant level, the hypothesis was rejected. If the p-value was found more 0.05 then the hypothesis was accepted.

H01-There is no significant difference between male and female in terms of programme learning outcomes and effectiveness

H02 - There is no significant difference between male and female in terms of programme effectiveness

Table 8
Gender Influence over Programme Learning Outcomes and Effectiveness

	Gender	N	Mean	Std. Deviation	Std. Error Mean	t	df	sig(2-tailed
Programme Learning Outcomes	Male	905	4.173	0.58	.01913	.061	2419	.126
	Female	1516	4.174	0.52	.01338			
Programme Effectiveness	Male	905	4.1347	.56943	.01893	1.995	2419	.321
	Female	1516	4.0881	.54911	.01410			

In terms of programme learning outcomes, Table 8 shows that for this research sample (n=2421), the mean values of female (M=4.174, SD= 0.52, n=905) are almost similar to that of male (M=4.173, SD =0.58, n=1516) in terms of learning outcomes. It is not significant (p=0.126, t (2419) = 0.624) as the p-value is more than 0.05 level. Therefore, the hypothesis 1 is accepted which says that there is no significant difference between male and female in terms of learning outcomes.

Similarly Table 8 shows the insignificant (p=.321, t(2419)=1.995) influence of gender on programme effectiveness. As p> 0.05, hypothesis 2 is accepted which says that there is no significant difference between male and female students in terms programme effectiveness.

Influence of Income on Programme Learning Outcomes

One Way Anova test was used to test this hypothesis because the independent variable has more than two groups and data is normally distributed. The following null hypotheses were tested. If the p-value of the test result is found less or equal to 0.05 significant level, the hypothesis is rejected. If the p-value is found more 0.05 then the hypothesis is accepted.

H03: There is no significant difference among different income groups in terms of learning outcomes

Table 9 shows that there are significant differences among different income groups in terms of learning outcomes. For this research sample (N= 2421), the mean scores of the group 'more than rm 2500'(M= 4.24 Sd=0.544, N=1042,p=.000) and rm1501-2000 (M= 4.19 Sd=0.501, N=205, p=.000) are higher and significant (Table 7.2) than those of other 3 groups 'less than rm 1000' (M= 4.07, Sd=0.543 , N= 701), group 'rm1000-1500' (M= 4.16, Sd= .49 , N=208) and group 'rm 2001-2500' (M= 4.24, SD= .54, N=265). The perception regarding the learning outcomes among different income groups are significantly different, F(n1= 4, n2= 2416), p < .05. Therefore Ho3 is rejected as it is true that learning outcomes differ based on level of income.

Table 9
ANOVA Result and Descriptive statistics on learning outcomes

Income Group	N	Mean	SD	SE
Less RM1000	701	4.0718	.54301	.02051
RM 1000- RM 1500	208	4.1647	.49497	.03432
RM 1 501 - RM 2 000	205	4.1886	.50196	.03506
RM 2 001 - RM 2 500	265	4.1767	.56076	.03445
More than RM 2 500	1042	4.2408	.54308	.01682
Total	2421			

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12.035	4	3.009	10.406	.000
Within Groups	698.560	2416	.289		
	710.596	2420			

Influence of Income on Programme Effectiveness

One Way Anova test (Table 10) was used to test this hypothesis because the independent sample has more than two groups and data is normally distributed. The following null hypotheses were tested. If the p-value of the test

result is found less or equal to 0.05 significant level, the hypothesis is rejected. If the p-value is found more than 0.05 then the hypothesis is accepted.

H04; There is no significant difference among different income groups in terms of programme's effectiveness

Table 10 shows that the mean scores of the group 'more than rm 2500'(M= 4.20 Sd=0.50, N=1042,p=.000), rm 2001-2500 (M=4.08,SD=0.57, N=, p=.02) and rm1501-2000 (M= 4.11 Sd=0.52, N=205, p=.000) are higher and significant (Table 7.4) than those of other 2 groups 'less than rm 1000' (M= 3.97, Sd=0.50 , N= 701), group 'rm1000-1500' (M= 4.07, Sd= .61 , N=208. P>.05). The perception regarding the programme effectiveness among different income groups are significantly different, F(n1= 4, n2= 2416), p < .05. Thus H04 is rejected. It means that programme effectiveness varies based on income level of the people.

Table 10
ANOVA Result and Descriptive statistics on programme's effectiveness

Income Group	N	Mean	SD	SE
Less RM1000	701	3.96	.61787	.02334
RM 1000- RM 1500	208	4.07	.50683	.03514
RM 1 501 - RM 2 000	205	4.11	.52364	.03657
RM 2 001 - RM 2 500	265	4.08	.56747	.03486
More than RM 2 500	1042	4.2	.50527	.01565
Total	2421			

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24.056	4	6.014	19.983	.000
Within Groups	727.116	2416	.301		
	751.171	2420			

Influence of Job Status on Programme Learning Outcomes and Effectiveness

One Way Anova test was used to test this hypothesis because the independent variable has more than two groups and the data is normally distributed. As the test result was found significant, Post hoc test was also employed to find the influential job status. The following hypotheses were tested. If the p-value of the test result is found less or equal to 0.05 significant level, the hypothesis is rejected. If the p-value is found more than 0.05 then the hypothesis is accepted.

H05: There is no significant difference among different job status in terms of learning outcomes

Table 11 shows that there is significant difference among different job status in terms of learning outcomes. The mean values of part time (M=4.11) and unemployed students (M=4.01) are found significantly (p<.05) lower than other job status such as government (M=4.22), private (M=4.22), self-employed (M= 4.21) and full time group (M=4.14). Therefore, there is significant difference among different job status in terms of learning outcomes. Therefore, H05 is rejected.

H06; There is no significant difference among different job status in terms of school effectiveness

Table 11 shows that there is significant difference among different job status in terms of programme effectiveness. The mean values of Part time (M=3.94), Unemployed (M=3.97 Private students (M=4.12) are found significantly

(p<.05) lower than other job status such as government (M=4.21), self-employed (M= 4.18) and full time group (M=4.23). Therefore, there is significant difference among different job status in terms of programme effectiveness. Thus H06 is rejected. It means that lifelong learning programme is less effective to part time employees and unemployed people

Table 11
Influence of job status over programme learning outcomes and effectiveness

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Learning outcomes	Between Groups	14.546	5	2.909	10.094	.000
	Within Groups	696.050	2415	.288		
	Total	710.596	2420			
Effectiveness of program	Between Groups	23.832	5	4.766	15.826	.000
	Within Groups	727.339	2415	.301		
	Total	751.171	2420			

Correlation between Programme Learning Outcomes, School Effectiveness and Quality

As data was normally distributed, Pearson correlation coefficient was used to find the correlation among learning outcomes, school effectiveness and quality improvement. Result shows that learning outcomes are strongly, positively and significantly correlated to programme effectiveness (r=.657, P<0.01) and programme quality (r=0.582, P<0.01).

Table 12
Correlation between Learning Outcomes, School Effectiveness and Quality Improvement

Correlations				
		Learning outcomes	Quality improvement	Programme effectiveness
Learning outcomes	Pearson Correlation	1	.582**	.657**
	Sig. (2-tailed)		.000	.000
	N	2421	2421	2421
Quality improvement	Pearson Correlation	.582**	1	.634**
	Sig. (2-tailed)	.000		.000
	N	2421	2421	2421
Programme effectiveness	Pearson Correlation	.657**	.634**	1
	Sig. (2-tailed)	.000	.000	
	N	2421	2421	2421

**. Correlation is significant at the 0.01 level (2-tailed).

DISCUSSION

Data collected shows that UMCCeD programmes objectives are partially achieved though the quality of the programmes was found to be at a high level. This is because, after graduation, it was expected that graduates' salary would increase, and promotion would be expected. But UMCCeD graduates reported that the salary increase, and promotion are not at expected level. It can be assumed that this is due to a lot of the part timers are already in the same job and they have to follow the official norm, procedure and seniority. The scenario can be different if they change their job. The finding is in line with an article in a newspaper in Malaysia which stated that there is no linear path to a higher salary as career success will still depend on a balanced skill set, which includes soft skills (Rozana Sani, 2020).

With slight exception, programme learning outcomes, effectiveness and quality were rated very high by the respondents. UMCCeD is one of the centre of University of Malaya (QS world rank 70 in 2020) which has to maintain the global standard. The study result may be the reflection of maintaining that standard. In regards to learning outcomes, UMCCeD raised students level of awareness of lifelong learning needs and ability at high level. UMCCeD has given them confidence to communicate within organizations and the environment, to analyse and interpret data, to identify, formulate, provide creative, innovative and effective solutions to specific problems at high levels. They have developed skills to discuss global issues related to the area study, effective interaction among members in the group, using superior principles in design and development, and explaining professional and ethical responsibility. In terms of the programme effectiveness, respondents expressed their moderate level of satisfaction in regards infrastructure and ICT uses and customer services. UMCCeD is situated in a high rise building outside of the main campus which may be the reason of students' less satisfaction. Though the programme's effectiveness in terms of infrastructure, ICT uses, and customer service is at moderate level, the quality of UMCCeD programmes designed for full and part timers was found to be very high. The programmes were assessed in the areas of teaching- learning to career prospects, curriculum quality, delivery and assessment, focusing practical skills than theory, and programme delivery with current issues.

This study finds no significant difference between male and female in terms of learning outcomes and effectiveness of lifelong learning programmes. This finding is in line with Persico (2014) who described the effectiveness and outcomes of lifelong learning programmes irrespective of ethnicity, gender and socioeconomic background. Some studies recommends that social learning platforms as initiated by lifelong learning requires different categories of employees such as stakeholders, students, teachers irrespective of gender differences (Bodea & Dascălu, 2009; Purnuş & Bodea, 2013). Alexis Carr et al. (2018) also suggested the lifelong learning to promote developments in light of gender empowerment.

Another finding shows that learning outcomes of lifelong learning programmes differ based on the level of income of the students. Learning outcomes seem positively correlated to higher income. This result contradicts with Tekkol and Demirel (2018) who found no association with the income levels. Some other previous studies have also concluded that the difference in income levels have no effect on self-directed learning skills (Acar, 2014; Atacanli, 2007; Kiliç & Sökmen, 2012). Meanwhile, other studies in line with the findings of this study show that the children of lower or middle income countries were not able to perform well because of the underdeveloped foundational reading skills besides being instructed after several years (UNESCO, 2012; Uwezo, 2012).

This study also finds lifelong learning programme less effective to part timers and unemployed people. Though mostly lifelong learning programs are designed in a way to provide training for personal developments with monetary benefits as a mode of employment for unemployment youths, this study's results contradicts this notion. Another study which is in line with this result reported that very little percentage, about 20% in Malaysia utilized their acquired knowledge to manage very meagre incomes with small scale businesses units (Su-Hie et al., 2015). However, in European countries, the lifelong learning programs integrated with the social networking are proven to be beneficial for development (Bodea et al., 2016). It can be assumed that probably most part timers

and unemployed lifelong learning students have less skill though they have education. This is supported by Lonela (2012) who considers education as necessary but not sufficient for an individual to enjoy good labour market outcomes.

Policy Recommendation

The programmes in UMCCeD should actively look at ways to increase the percentage of students from lower income families. These are the people who require skillsets the most to change their fortunes. This could be done through providing scholarships or reducing course fees.

This research found that 57% of alums of UMCCeD took a degree outside their main field of study or work. This data could be directly correlated with only around 19% of alums receiving increased salary or promotion in their line of work. This issue could be dealt with by broadening the subjects offered and providing the alums with a carrier advice centre to broaden their carrier prospects after the degree. A total 84.7 % of alums of UMCCeD said that they would prefer to take higher education on the subjects. The university could offer scholarships and other incentives to alums to further pique their interest for higher education from the university. Our study found that the majority of students (62.7%) are women. Programme coordinators should investigate the reason of this large gender disparity and take proper and proper action to reduce the disparity.

While this course design is very work friendly, another course design should be implemented for full time students to increase their percentage from a meagre 0.7 %. This could be done by reducing course time or providing extra credits. Learning outcomes of lifelong learning programmes differ based on level of income of the students. Higher income seems positively correlated to learning outcomes. The cost for lifelong learning programmes should be within the reach of all level of people. Lifelong learning programme is found to be less effective to part timers and unemployed people. It should be designed in way so that students without job may learn some skills to compete in the local and global job market.

Limitations

The study result cannot be generalized in other perspective as the data were collected from only one university. The views of researchers may also be influenced by the working experience at the same university. The instruments were developed (questionnaire) in consideration of the needs of UMCCeD.

CONCLUSION

Though there are limitations of findings, the study has met its objectives at UMCCeD perspective. Lifelong learning outcomes have been found effective irrespective of gender disparity. Income has been found making difference in learning outcomes and effectiveness. It may be the reason of affordability to have access to quality education and supportive materials. Lifelong learning is also found to be less effective to part time employees and unemployed. The reason might be due to them having fewer opportunities to use the education. Alongside having education, having certain skills is also the vital factor to improve oneself. Thus, along with education, acquiring some specific skills can also play significant roles to achieve the right outcomes. Lonela (2012) suggests that in addition to education, good labour market opportunities for the skilled persons require an economy as a whole to be operating well, with macroeconomic stability, an attractive investment climate, and efficient labour markets, in addition to other factors.

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