

Online vs. Traditional MBA: An Empirical Study of Students' Characteristics, Course Satisfaction, and Overall Success

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ABSTRACT

MBA has become one of the most popular postgraduate degrees worldwide today. An MBA degree may give someone a significant increase in salary or enable him or her into a management position. With the advancement of online education, online MBA courses become increasingly popular among students. However, main questions are left without consistent answers. Are online MBA courses taken by a student group that is similar to that of traditional face-to-face MBA courses, in terms of student demographic backgrounds, such as age, gender, and full-time status? Can the online MBA courses provide the same quality that the traditional MBA courses do? Do online MBA courses have similar student satisfaction rating to what traditional face-to-face MBA courses have? Quantitative method was employed in this study to approach these questions. Data were collected from over two thousand students from the year of 2002 through the year of 2010 and a total of 153 courses were included accordingly. This study finds that the two different modes of MBA course delivery attract different types of student groups. The online MBA courses tend to attract female, older adult, part-time, and married students. Nevertheless, no significant differences in overall success, defined as passing the course, are found between those who have taken online MBA courses and those who have taken traditional MBA courses. However, the findings also reveal that these courses have lower overall satisfaction rating from the students than the traditional face-to-face courses. The value of online education in MBA education for the benefits of individual students and educational institutions is discussed in this investigation. Implication of the study and future research are addressed as well.

INTRODUCTION

MBA program is one of the most popular degree programs among the college graduate adults. More and more of them are returning to graduate schools for higher level of education to gain some competitive advantages. As theories about human capital and signaling in the marketplace indicate, higher education is the door to individual social mobility and national economic prosperity (Spence 1973; Schultz 1961). What the returning adults are often looking for by studying for a graduate degree is a better position in the job market, either for job-hunting or job-performing. In today's job market, employers are looking for "knowledge workers" who can perform complex tasks, are value-added, and can continuously learn the new skills and knowledge (Choitz and Prince 2008; Merriam and Brockett 2007). Individuals have to be trained and re-trained to keep up with the economy that is fueled by extraordinary technology advancements. For many of the positions, especially the newly-created ones that are not conveniently outsourced to low-cost countries and regions, a graduate degree is often a must. That is the case particularly in developed countries, such as the United States.

More often than not, online MBA courses are available to returning graduate business students on most campuses, in addition to traditional face-to-face ground courses. As traditional face-to-face education, online education is one main type of educational delivery methods, though it currently plays a different role from traditional face-to-face education. Online education is often used inter-exchangeably with distance education. It is a new and recent development of distance education. Through Internet and the World Wide Web, it permits real-time and asynchronous course delivery and provides multimedia experiences with rich educational resources. In online courses, teachers can deliver teaching through video, audio, as well as texted contents. Students can participate in e-learning through online course interfaces and their threaded discussion groups, electronic and linked resources, virtual conferences, online chat room, as well as multimedia course contents. Online education enables learning and teaching anytime, anywhere, at different paces, without traveling around as long as online or mobile access technology is available. In contrast, face-to-face education is the traditional and dominant delivery method. It requires both course instructors and learners to be physically present at the same place and learning/teaching to take place at the same pace and contents.

Online education is popular and becomes increasingly popular among adult learners. With the advent of Internet and electronic delivery technologies, online education has proliferated in use. Almost all disciplines have seen its presence in teaching and learning, within the United States and globally. The Sloan Foundation's 2009 report, *Learning on Demand: Online Education in the United States 2009* reports that over one-quarter of all higher education students are now taking at least one online course; the online course registrations at colleges have continued to grow much faster than residential or campus enrollments — the online enrollment growth rate up 17 percent from 2007 to 2008 alone, compared to a 1.2% overall total enrollment growth rate (Allen and Seaman 2010). For many adult learners, it is a preferred method. Survey shows that 80% of the young adults say that they would choose to go back to school online and six out of ten would be interested in doing it online if they would do so (E-Learner 2007). Ambient Insight reports that online education has become a gradually more popular option in the busy lives of adult learners, with over 1.5 million individuals enrolled across the U.S. The report also predicts that the amount of students taking classes online should triple before the year 2015 (Classes and Careers 2010). Also importantly, when higher education industry faces the surge of enrollment, limited spaces, funding cut, and depressed economy, the institutions try to expand online course and program offerings and attract student to enroll in online courses.

As an increasing number of working adults who pursue further education choose online education, especially online business education (Linardopoulos 2010), it becomes ever more important for researchers and practitioners to study online business education. Among various topics, fundamental to adults' future strategic growth is to find out a) whether online educational delivery provides access to different types of adult student population and b) whether the online course adult-takers perform as well as those ground face-to-face course adult-takers (Forsyth et al. 2010). Potential findings will help institutions and policy-makers take proper actions and enact effective policies to ensure equal access and sound quality for online education. More so, such findings may guide adult learners to choose the right educational delivery methods that fit their characteristics as well as their needs.

This study approaches the two fundamental questions in regard to online business education through analyzing student background, course satisfaction, and overall success information. Relevant data from a set of working-adult-oriented MBA courses delivered in a dozen terms over several years are gathered from a private four-year college in the United States. Specifically, three research questions are pursued. They are:

- Are online MBA courses taken by a student group that is similar to that of traditional face-to-face MBA courses, in terms of student demographic backgrounds, such as age, gender, and full-time status?
- Can online MBA courses provide similar quality to what traditional face-to-face format does, as reflected by overall course success?
- Do online MBA courses have similar student satisfaction rating to what traditional face-to-face MBA courses have?

Comparing online education with traditional face-to-face educational delivery method, this study focuses on online MBA courses. It firstly reviews literature, which points out how a specific research on the access/equality and quality issues in regard to online MBA education can be conducted. It also explains its research methodology. Then its center of attention is given to the main purpose of this study and compares demographic background, course satisfaction, and overall course performance of students who took online courses with those who took traditional face-to-face courses over several years. In addition, it discusses the findings and makes conclusions. Finally, implications of the findings and further studies are mentioned.

LITERATURE REVIEW

Online education, a development from distance education, has been studied well for a long time, if including the studies on distance education. This section reviews relevant literature to help guide the analysis and discussion of this study. It organizes the review around three topics: 1) demographic background of online education students, 2) student perception of online education; 3) quality of online education, and the perception of students, employers, and faculty on online education quality.

Many studies compare the demographic background among students who enroll in online courses as opposed to traditional face-to-face courses. They have revealed a wide range of differences across different college types. Halsne and Gatta (2002) find: in one community college, typically online learners are female, Caucasian, twenty-six to fifty-five years of age, work full-time as professionals, and have more education and a higher family income than their traditional counterparts. Ashkeboussi (2001)) and Utts et al. (2003) find that online students are actually traditional students who sign up for the course because of scheduling or logistic conflicts in state universities (as cited by Cited by Ward 2004). A national study finds that there is an equal mix of students over and under twenty-five years of age, and who are full-time and part-time (National Education Association 2000).

Lewer, Gerlich, and Pearson (2006) studied how demographics are related to online learners and how the online business education market can be segmented. Their reviewed national studies concerning the demographics of online students suggest that the students are older (35) and seeking online courses for career development and a clear profile of online undergraduate business students is emerging. In terms of age and marriage, several of their reviewed articles note that online students tend to be older than traditional-age students. These students are also more likely to be employed, as well as married and/or with children. Their reviewed studies also report that more females enroll in colleges and online courses. Their own research suggests that many of their online students studied fit the demographic profile of the traditional college age (18 - 24) student. Based on their findings, they suggest that business online market can have four segments: a) Adults with families and careers; b) single working parents; c) traditional-age college students with jobs; and 4) distance learners.

The quality of online education has always been under the scrutiny of serious research. Most of the existing studies seem to conclude that online education is at least comparable to its ground counterpart. An annotated bibliography consisting of 355 research reports, summaries and papers pertaining the quality of online education has concluded that online education is comparable, occasionally, even superior to traditional face-to-face education (Russell 2001). As Ward (2004) reviews, a significant amount of research suggests that no significant performance difference exists among the online and face-to-face educations, in pretest and posttest scores and grades.

The quality of adult learners in online education is a main focus of several publications. Such studies tend to conclude that there is no significant difference in performance between adult learners and their younger peers. For example, Boghikian-Whitby and Mortagy (2008) found that both adult and traditional-age students who enrolled in information sciences courses show no significant difference in examination grades and final grades. Still, some studies suggest certain specific differences exist, such as extra credit (Erickson and Noonan 2010). Erickson and Noonan (2010) use a mixed-method study and examine both the academic performance and instructional support needs of late-career adults (aged 50-65) in an online course as compared to early-career (aged 21-35) and mid-career (aged 36-49) adults. They find that late-career adults perform as good as or better than their younger peers after receiving the technical assistance.

While quality and access are important, on the other hand, publications reveal that perception may not agree with actual quality. These perceptions are insightful for discussing findings about quality and access. Two major types of perceptions studied, from the perspectives of students as well as employers are reviewed here.

Studies on the differences in student perceptions about online and face-to-face education indicate that online learners are as satisfied or more satisfied. Yehia Mortagy and Boghikian-Whitby (2010) found that online students are more satisfied with the course activities than face-to-face students. Online students perceive that faculty have high expectations; faculty members are available; faculty interact and communicate with students in a timely manner; and course activities include critical thinking skills. There is no difference in the time flexibility or student-to-student interaction between fact-to-face and online students. Herbert (2006) examines student online course retention and course satisfaction and finds that while successful completers are more satisfied with all aspects of the online courses; neither completers nor non-completers rank their overall experience exceptionally high.

However, employers seem to have negative attitudes and much doubts about the quality of the degrees obtained online. A literature review on employers' perception of online degrees spanning nearly seven years around 2002 and 2008 largely suggests that marked stigma may be attached to online degrees throughout the hiring process within many industries. Except in a few, such as health care and community colleges, all scholarly research studied has concluded that the "gatekeepers" have an overall negative perception about online degrees. This is particularly evident at the level of a bachelor's degree for those seeking an entry-level position (Columbaro and Monaghan 2009).

Research shows that faculty members are also skeptical about the quality of online instructions. Mills, Yanes, and Casebeer (2009) surveyed faculty in a Texas university and their study focuses on the reluctance of faculty to participate in online course delivery. Their qualitative study suggests that faculty members are reluctant because they have concerns about the inferior quality of online instructions to traditional delivery methods.

When examining literature on online education in regard to student demographics and quality, several patterns emerge: First, there are plenty of studies about general online education, but literature on

online businesses education are relatively much less, despite the fact that online education in business presents often the biggest portion among all disciplines on campuses where online education exists. According to Allen & Seaman (2008), the existence of online education was from a range of 24 percent (psychology) to 33 percent (business) for different discipline areas. Second, these publications mainly focus on online education at the undergraduate level; the graduate level online education is less studied, especially in graduate business education. On the other hand, research shows that the two levels are different and online education may be more suitable for graduate level (Arbaugh 2010). Third, the data used by the existing studies are often small and they are often one-time efforts. Most are surveys done in a short period of time. Studies with data spanning a period of time are not many. Fourth, the studies often are not selective in the available samples of courses when compare online and face-to-face education. They do not control whether it is the same set of courses, offered by the same instructors, and under the same disciplines.

RESEARCH METHODOLOGY

To approach the two research questions, this study uses available historical, not experimental, data from a four-year private comprehensive university of the western region in the United States. We gathered student demographic background information of MBA students to determine whether online business education brings diversity as well as its provision of more access. To study the quality of online and face-to-face courses, we extracted data about student course passing information, and took the following four steps to collect and analyze available data before analyzing the data.

First, all online MBA courses offered since winter 2002, the earliest term available, were extracted from databases. Some of these courses are chosen and then paired with face-to-face courses, with the criteria that if a professor taught courses online for a given term, his or her face-to-face modes of the same courses in the same terms, immediately before the terms, or following the term are all included. Otherwise, the online courses are excluded. A total of 153 courses, 93 in online education mode and 60 in face-to-face mode, spanning across 24 terms and eight years, were extracted (see Table 1 for courses delivered and studied). These courses were delivered by 15 faculty members at the College of Business. Five of them were well-established senior part-time faculty. The rest of them were full-time faculty members who had been at the university for several years.

Table 1: Courses Selected and Delivered

Academic Year	Courses Selected*		Courses Delivered		Course Studied/Course Delivered	
	Online	Face-to-Face	Online	Face-to-Face	Online	Face-to-Face
2003-04	18	4	59	449	30.5%	0.9%
2004-05	22	15	91	369	24.2%	4.1%
2005-06	11	7	51	335	21.6%	2.1%
2006-07	12	8	48	348	25.0%	2.3%
2007-08	18	17	52	361	34.6%	4.7%
2008-09	7	6	43	393	16.3%	1.5%
2009-10	4	3	50	402	8.0%	0.7%
Total	92	60	396	4027	23.5%	1.5%

Second, all of the students who had taken the final selected and paired courses are studied. Their background information was extracted from the university database. The purpose for extracting these data

is to examine whether student demographic backgrounds are different between the students who take the two different types of educational delivery methods. Specifically, their gender, ethnicity, full-time status, legacy type, and marriage status are analyzed. In the analysis, those who have received a final grade are examined.

As a result, a total of 2533 students took the courses selected for this study. The main demographics of the students are: 50.1% of them are female and 49.2% are male (.6% missing); Age ranges from 22 to 90, 5.1% under 25 years old, 50.3% between 25 and 34, 27.5% between 35 and 44, 14.6% between 45 and 54, 2.6% above 54, with a mean of 35 years old; 1402 indicated their marriage status and 43.4% of them were married; 57.3% of them studied on a full-time basis.

Third, course letter grades data of all students who took the selected MBA courses were extracted from the university database. Student course success, defined as passing courses, is analyzed to reflect the overall quality of educational delivery. This study uses overall course success as an indicator for online MBA course quality because passing courses and earning MBA degree are the primary and most important goals for returning adults who pursue MBA education. Grades of B or better is considered as “success/pass” for graduate students by the university policy. Those students who received grades, regardless whether they are letter grades or incomplete grades or Ws, are also considered as being retained. Among the retained students, 92.5% of them successfully passed the courses they took.

Fourth, the overall 4-point scale results of the course evaluations of the selected courses were extracted and compiled. Such data were available for the year of 2006 through the year of 2009. The overall student satisfaction results of the two different modes are compared.

DATA ANALYSIS

Comparison of Student Demographics

- **Research Question 1:** Are online MBA courses taken by a student group that is similar to that of traditional face-to-face MBA courses, in terms of student demographic backgrounds, such as age, gender, and full-time status?

A total number of 3784 students took the 153 MBA courses included in this study. 2533 students have valid grades and 251 do not. They are all students who had registered the courses studied at some points. Of those who had received grades, chi-square and other tests are used to test the differences in a variety of backgrounds. If needed, certain categories are combined to satisfying the needs that all cells should be equal to or more than 5.

Age is firstly examined. The average age for students who took online MBA courses is 35.6; while it is 34.3 for those who were in face-to-face courses T-test indicates that the difference is significant ($t=3.366$, $df= 2531$, $p=0.001$). Even after those age ($n=8$) over 65 are excluded, the difference is still significant (35.37 online v. 34.24 traditional, $p = 0.001$). An analysis of the students by age range suggests that 64.2% of those who took online MBA courses were 30 years old or older, while only 54.4% of those who took traditional face-to-face courses were so (see Table 2: Age Range of Online and Traditional Methods for detail).

In terms of student gender, 52.2% of those who took online MBA courses were female. In comparison, 47.4 of the male took online courses. Only 46.5% of those taking face-to-face traditional mode courses were female. 52.6% of the male chose traditional face-to-face courses. Chi-square test indicates that female MBA students are significantly more likely to choose online courses (Chi-square =6.531, $df=1$, $p=0.011$).

The full-time and part-time study status of the students examined is also analyzed. About half (47.2%) of those who took online courses had studied on a half-time basis, while less than one third (34.5%) of those who took face-to-face courses did so. Chi-square test suggests that the differences are significant and part-time students may be more likely to choose online courses (Chi-square = 38.337, df = 1, p= 0.000).

This study also examines student marriage status. Of those 1402 students whose marriage status was available, almost half of those MBA students who took online courses were married (48.8%). Comparatively speaking, fewer than 40% (36.9%) of those chose face-to-face courses were married. Chi-square test indicates the difference is significant (Chi-square =19.252, df =1, p= 0.000).

Table 2: Age Range of Online and Traditional Methods

			Traditional	Online	Total	
Age Range	24 and younger	N	52	77	129	
		%	5.7%	4.7%	5.1%	
	25-29	N	314	431	745	
		%	34.5%	26.5%	29.4%	
	30-34	N	173	355	528	
		%	19.0%	21.9%	20.8%	
	35-44	N	225	471	696	
		%	24.8%	29.0%	27.5%	
	45-54	N	124	245	369	
		%	13.6%	15.1%	14.6%	
	55 and above	N	21	45	66	
		%	2.3%	2.8%	2.6%	
	Total		N	909	1624	2533
			%	100.0%	100.0%	100.0%

A combination of the effect of age, gender, marriage status, and full-time study status on the choice of educational delivery method choice shows interesting results. To study how these factors predict an adult student' choice between online courses and traditional face-to-face course, logistic regression is used. Excluding those who are 24 years old and younger, this study finds out the combined factors predict over 60% (60.3%) of the choices among adult students correctly (Nagelkerke R Squareb =0.071, N= 1294). All of the factors show to be statistically significant in the model. See Table 3 for detail. Female, older, married and part-time adult MBA students are more likely to choose online courses. Age has moderate strength in its relationship with the possibility of choosing online courses. Full-time status has a very strong negative relationship with the possibility to choose online courses.

Table 3: Predictors of Online MBA Course Selection

	B	S.E.	Wald	df	Sig.	Exp(B)	BCI
SEX (1=Female)	0.227	0.115	3.886	1	0.049	1.255	0.774
Age	0.143	0.057	6.364	1	0.012	1.153	3.252
Marriage (1=Married)	0.267	0.127	4.416	1	0.036	1.306	1.304
Full-Time Study Status (1=Full Time)	-0.686	0.122	31.837	1	0	0.504	28.725
Constant	-0.119	0.221	0.293	1	0.589	0.888	-2.819

* BCI (Bayes Information Criterion) indicates the strength of the factor in prediction. 0-2 is weak; 2-6 is moderate; 6-10 is strong, and over 10 is very strong.

Comparison of Student Performance

- **Research Question 2:** Do students who take online MBA courses perform differently from their face-to-face counterparts?

Student success is crucial to the quality of online course delivery and is thus examined. First, student course passing rate is examined. 91.9% of those who took online courses passed them, while a similar percentage of those (93.7%) who took face-to-face mode courses also passed the courses. Fisher's T-test is adopted to analyze those who were retained in the courses studied. It suggests that the differences, 1.8%, in student successful passing of the two modes of courses are not significantly different ($p=0.98$). For detail, see Table 4.

Table 4: Student Success/Pass and Online Delivery Status Cross-tabulation

		Traditional	Online	Total
Did Not Pass	N	57	132	189
	%	6.3%	8.1%	7.5%
Pass	N	852	1492	2344
	%	93.7%	91.9%	92.5%
Total	N	909	1624	2533
	%	100.0%	100.0%	100.0%

To find out how adult students perform in online and face-to-face courses, this study excludes those who are of 24 or younger and analyze how various demographic factors may have influenced the possibility of passing online courses. Using the success or not as dependent variable and gender, age, marriage, and full-time study status, logistics regression reveals no major significant relationship (Overall Percentage predicted correct, 91.7%, Nagelkerke R Square .009, N= 1294). As shown by Table 5. Marriage is the only factor that seems to be of some importance. Those who are married have more chances to be successful in passing the courses.

Table 5: Predictors of Course Success

	B	S.E.	Wald	df	Sig.	Exp(B)
SEX	-.164	.204	.647	1	.421	.849
Age	-.112	.097	1.324	1	.250	.894
Marriage	.446	.226	3.904	1	.048	1.562
Full-Time Study Status	.081	.213	.146	1	.702	1.085
Constant	2.622	.391	44.871	1	.000	13.764

Comparison of Student Satisfaction

- **Research Question 3:** Do online MBA courses have similar student satisfaction rating to what traditional face-to-face MBA courses have?

At the end of each term, students of all courses are asked to voluntarily respond to a university-wide course evaluation survey. The aggregated course averages from Likert-scaled questions along the overall response rates for the MBA courses studied are examined. The Likert-scales questions ask whether students agree with positive course and teacher characteristics for the courses student take.

In terms of course evaluation numerical satisfaction results, the online MBA courses examined appears to receive somewhat lower rating by its students than traditional face-to-face courses. As seen in Table 6, the mean of the online courses is 3.511, while that for the face-to-face courses is 3.632.

Independent T-test indicates that the difference is significant at 0.05 level ($t=2.172$, $df = 68$, $p=0.033$). The differences in overall mean and the T-test result indicate that online MBA students are probably less satisfied with the courses that they have taken or with the instructors who have taught the courses than their counterparts who have taken face-to-face courses, although they are similar in the likelihood to respond to the survey.

Table 6: Student Course Evaluations and Response Rate

		N	Mean	Std. Deviation	Std. Error Mean	T-Test for Equality of Means		
						t	df	Sig. (2-tailed)
Satisfaction Rating	Online	38	3.511	.217	.035	-2.172	68	.033
	Traditional	32	3.632	.251	.044			
Response Rate	Online	38	.741	.222	.036	-.577	68	.566
	Traditional	32	.774	.268	.047			

DISCUSSIONS AND CONCLUSIONS

The above data analysis on student demographic background and student performances in regard to online and face-to-face delivered MBA courses provides basis to conclude some answers to the two research questions asked.

As for the first research questions, this study finds that students who choose online and face-to-face MBA courses tend to come from different demographic groups.

Table 7 summarizes the statistical tests used for examining various demographic characteristics. Of all the examined variables, students of the two modes are significantly different in all except one, first generation status. The findings on age, gender, race, full-time study status, as well as marriage status seem to confirm what other studies have found. Adult (especially those of 35 years old or over), female, married, part-time students are more likely to choose online MBA courses. These findings confirm what many publications have reported, as the literature review indicates (Lewer, Gerlich, and Pearson 2006). It is understandable that full-time study status has very strong negative relationship with the possibility of choosing online courses. Such students probably have more resources to support to go to classrooms, or they are more committed to engage in both relationship building and knowledge learning.

Table 7: Summary of Statistical Tests on Student Demographics

	Test	Value	df	P
Age	T-Test	3.423	2782	0.001
30 Years Old +	Fisher - T			0.000
Gender	Chi-square	6.531	1	0.011
Full-Time Status	Chi-square	37.052	1	0.000
Marriage Status	Chi-square	19.252	1	0.000

In terms of course success, this study examines course passing rates. The results suggest that those who take online courses perform as well as those who take face-to-face MBA courses. Among those who are retained, the difference in delivery modes seems to have no relationship with the possibility that whether they student can pass the course. The passing rates are similar. For adult MBA students, there is no significant factor that can predict successful course passing possibility. The only factor that shows having some impact on courses success is marriage, which is not difficult to understand. Marriage

students often have some extent of consistent supports from their spouses, which is helpful in their course success. Online or face-to-face modes are not likely to have significant relationship with course success. Therefore, this study seems to suggest that no significant success difference exists among the students who have taken different delivery modes of MBA courses. This finding is consistent with the studies of Boghikian-Whitby and Mortagy (2008), Erickson and Noonan (2010), Ward (2004), and the articles reviewed by Russell (2001).

The analysis on course evaluations suggests that online MBA students are less likely to be satisfied with the courses they have taken, in comparison with their counterparts who have taken face-to-face courses, although they tend to respond to the survey as much their counterparts do. This finding is in contrast with others, such as Ward (2004), who finds the opposite. Why they are less satisfied? Is it because of the delivery modes or because of the special student groups those who choose online MBA courses are? The reasons are beyond the examination of this study.

Therefore, this study concludes that online MBA educational delivery attracts a student body that is different from traditional mode. Nevertheless, online MBA courses seem to deliver similar final student learning outcomes in terms of passing the courses, although the students may be less satisfied with the instructors or course delivery process. This study with mass data of paired same courses over many years and by the same professors reveals the value of online business education in both access and overall success. These findings suggest that the doubts and negative perceptions of employers and even faculty on the quality and overall value of online MBA education have no strong basis.

IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH

The implications of this study are multi-facets. Above all, online MBA education fits the learning needs of some student groups who are at disadvantageous position in taking traditional education. They are most likely to be married, working adults and female family care-givers and who prioritize other commitments other than full-time study. For various reasons, they often cannot make it to the traditional face-to-face classrooms. Online education broadens graduate business education and benefits prominently those individuals of the groups who are often at disadvantage in terms of pursuing traditional methods of learning.

Moreover, not only is online educational delivery possible, its quality is testified, as least in fulfilling the primary goals of those who pursue MBA education. Online graduate business education is thus valuable. The findings of this study provide evidence to support institutional online educational delivery. Those students who stay in the courses until the end have similar success as their counterparts who take traditional mode of course delivery. Thus, online educational delivery reaches more students, who otherwise could not have accessed the education they trust more, it generates more revenues for the colleges and universities, which are critical for both the institutions and the society in general, as reported by the Fain (2010).

One of the limitations is that qualitative method is not employed. Qualitative methodology can improve the efficiency of investigation. A qualitative approach is also more sensitive to human factors such as the motivations and performance of the personnel involved with traditional MBA and online MBA courses. Second, this study mainly employs quantitative method and used historical data that were originally collected for various purposes other than studying online education. Many important characteristics about the students and the course delivery process were not available. For example, status of student employment would be important. Lastly, this study bases on the rationale of student primary

goals and only uses overall course passing as a quality and success indicator. Other indicators are better, such as overall grades and actual student learning outcomes.

The discussions and conclusions mentioned above point out several topics to study in the future. First, while online business graduate education provides access, how diverse are the adult student population, particularly in terms of different races of the student bodies? Second, other student performance indicators and profound modeling in regard to grades can be doable. For example, how the grades are distributed among the students? How online adult student are retained? What factors can be helpful for their retention? Third, research can be done on the specific aspects and factors associated with course satisfaction of adult students taking online courses, with comparison with the traditional face-to-face courses. Studies can be also done on the factors that contribute to adult student satisfaction with online business education.

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