# Admission Decision Factors in an MBA Program: Beyond the Quantitative

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#### **Abstract**

Accreditors require that students admitted to a graduate program be likely to succeed. Success is often determined by a review of quantitative measures such as undergraduate grade point average or GMAT scores, or both. This study seeks to find reasons which support the admission of applicants despite a poor undergraduate performance. Older applicants with a record of professional success and a longer time since undergraduate degree conferral were found to be associated with success in the subject sample. This suggests the importance of developing an admissions process which takes into account broader measures of what indicates the likelihood of success.

#### Introduction

What suggests a student's readiness for and the ability to succeed at the graduate level? It is not unusual for graduate admissions department to use quantitative measures such as GMAT scores and undergraduate academic performance as proxies for success at the graduate level. This is supported by numerous studies that have sought to find the best predictors of success in graduate programs and specifically MBA programs. These studies have consistently found that the quantitative measures of GMAT scores or undergraduate cumulative grade point average (CGPA) or a combination of both are the most predictive of graduate student success as defined by graduate CGPA. (Ahmadi & Raiszadeh, 1997; Braunstein, 2002; Braunstein, 2006; Carver & King, 1994; Dekro & Woundenberg, 1977; Hoefer & Gould, 2000; Kass, Grandzoi & Bommer, 2012; Sulaiman & Mohezar, 2006; Yang, 2001). These studies go on further to acknowledge that despite being the most correlated to graduate school success, these measures, at best, only explain 20%-25% of the graduate CGPA. This leaves 75% - 80% of the graduate CGPA unexplained. This gap in the predictability of these quantitative measurers has led researchers to suggest the inclusion of qualitative factors when making admissions decisions (Ahmadi & Raiszadeh, 1997; Carver & King, 1994; Hoefer & Gould, 2000; Loucopoulos, Gutierrez & Hofler, 2007; Wright & Palmer, 1994; Yang, 2001).

This study looks at a part-time MBA program. Part-time MBA programs are those that offer the business graduate degree to students who work full time and are completing their studies on a less than full-time basis. Students who are interested in pursuing this part-time program of studies are typically highly motivated to complete the graduate degree in an effort to ready themselves for promotion to a first level or higher management level positions. Often times it has been five, ten, or even more years since the graduate student applicant has completed their undergraduate studies. Are these quantitative measures the best predictor of success when the time since undergraduate degree conferral is long? If not, the question becomes what is (are) the best measure(s) to use in these decisions. Are there more appropriate measure(s) to apply which will result in accepting students who are likely to be successful in a graduate business program?

The University's regional accreditor, the New England Association of Schools and Colleges (NEASC) requires in accreditation standard 4.24 that "Students admitted to graduate degree programs are demonstrably qualified for advanced academic study" (New England Association of Schools and Colleges, 2011, p.9). Further, this University's business program accreditor, the International Assembly for Collegiate Business Education (IACBE), includes a principle regarding admission of graduate students noting the institution "should have admissions standards in place that will help to ensure that students have a reasonable chance to succeed in the program" (International Assembly for Collegiate Business Education, 2011, p.74). Notably, neither accreditor is prescriptive in stipulating specific criteria to be applied, when making the decision to admit applicants to a graduate program. A critical decision point for the admission of students to an MBA program is determining that they have the ability to succeed.

This leads to the question, how is this ability to succeed demonstrated, and how can those admitting MBA students demonstrate and defend favorable admissions decisions? This study seeks to examine students, matriculated into a part-time MBA program at a small private, regional university program, not possessing a desired benchmark undergraduate CGPA of 2.8 or better on a 4.0 scale, hereafter referred to as "exception" admissions. The study examined the reasons for accepting these "exception" students, and then most importantly, reviewed their graduate academic records to determine whether these students were successful. Using qualitative techniques, the author performed an in depth examination of the rationale(s) for accepting these students and looked for consistencies in these rationales for supporting an exception decision for successful students. This was then contrasted to reasons used to accept similar students but who were unsuccessful in their graduate studies. Were there factors that were more often associated with success, or lack thereof? Also examined, using descriptive statistics, were the profile of these exception students, including their age at admissions, years since undergraduate degree conferral, undergraduate CGPA, undergraduate degree and undergraduate major. The purpose of this analysis was to determine whether a common profile emerged for exception students who were successful versus those who were unsuccessful.

The goal of the research is to develop a model for this university to be used in selecting candidates for the M.B.A. program who meet the NEASC standards and the IACBE principle for admission of graduate students. Further, this research is intended to identify important reasons and factors to be considered when admitting "exception" MBA students, to determine how application of non-quantitative measures may be improved to identify those "exception" students who will succeed. In short, the goal is to improve the admissions process in ways where students are accepted into the program who are more likely to succeed notwithstanding poor undergraduate academic performance. This is of particular import for non-traditional, part-time

MBA programs, which seek to provide opportunities to all who are prepared for graduate level education. In addition, it is the author's intent to develop and promote a culture of continuous improvement in the admission process.

#### **Literature Review**

There have been many studies conducted over the past 35 years with the goal of identifying predictors of success for graduate business students. These studies have consistently defined success as graduate GPA. The results of these studies have been similar in identifying quantitative measures including GMAT scores, and/or undergraduate CGPA as having the greatest predictive ability for the MBA CGPA (Ahmadi & Raiszadeh,1997; Braunstein, 2002; Braunstein, 2006; Carver & King, 1994; Dekro & Woundenberg, 1977; Hoefer & Gould, 2000; Kass, et al., 2012; Sulaiman & Mohezar, 2006; Yang, 2001). Although the research has been consistent in this finding, authors have noted that these quantitative factors only predict approximately 20%-25% of the graduate CGPA. The additional factor(s) which predict the graduate CGPA have not yet been identified.

The literature is clear that there are factors beyond the common quantitative ones that explain success at the graduate level. Many researchers in this area have indicated that there are qualitative factors that are likely to play a role in predicting student success (Ahmadi & Raiszadeh, 1997; Carver & King, 1994; Hoefer & Gould, 2000; Loucopoulos, et al., 2007; Wright & Palmer, 1994; Yang, 20013). Yang & Lu (2001) suggested including work experience and learning motivation as factors when making graduate school admission decisions. Several studies recommended the inclusion of qualitative factors in addition to the quantitative factors when making the admission decision. Qualitative factors suggested include: writing samples, recommendations, career statements, and personal interviews (Ahmadi & Raiszadeh, 1997; Loucopoulos, et al., 2007; Wright & Palmer, 1994; Yang, 2001). Carver (1994) found, in an examination of non-traditional students/adult learners taking a part-time course of study, that GMAT, undergraduate CGPA and work experience were the most predictive variables of academic success but the unexplained variance of the graduate GPA was still large at 80%. Findings as to the relationship of age, work experience, and undergraduate major have been mixed with some studies linking these factors to success of graduate students and others finding have no predictive ability (Ahmadi & Raiszadeh, 1997; Braunstein, 2002; Braunstein, 2006; Carver & King, 1994; Deis & Kheirandish, 2010; Fish & Wilson, 2009; Hoefer & Gould, 2000; Kass, et al., 2012; Palmer & Wright, 1996; Yang, 2001).

Despite the mixed findings, what is evident in the literature is that quantitative factors are the most predictive for graduate GPA, but the unexplained variance is large and thus indicative of other factors present which predict success. The published studies have examined both traditional and non-traditional, part-time, M.B.A. programs and have confirmed that there are other non-quantitative factors but there is not universal agreement on what these predictive factors may be based on the results of these studies.

The majority of existing research focuses on predicting success of the student by determining factors that explain the graduate CGPA. Rather than looking for predictors of graduate CGPA, this study looks to identify criteria beyond these quantitative measures that research has linked with success at the graduate level.

#### Methods

This study was a qualitative design using descriptive statistics. The small population of "exception" students limited the application of statistical techniques beyond basic descriptive statistics regarding the population demographics. The application of qualitative research techniques, however, allowed the researcher to look for common themes and reasons that were assigned to support "exception" student admission decisions. Analyzing the application of these reasons to successful and unsuccessful "exception" students allow the building of linkages and ultimately to a model or profile of the successful "exception" student. For purposes of this study, success was defined as a student who had completed at least 12 credits (4 courses) and their most recent graduate CGPA was 3.0 or better. Graduation eligibility at this University requires a CGPA of at least 3.0.

## **Sample Selection**

The sample consisted of all matriculated students for the academic years 2010-11 and 2011-12 with an undergraduate CGPA of less than 2.8. These students are referred to in this study as "exception" students.

## **Sample Description**

A total of 30 students out of a 157 matriculated students in the sample period met the selection criteria for exception admission. Table 1 provides descriptive statistics on the exception student profile.

**Table 1** *Exception Student Profile* 

	Mean	Median	Minimum	Maximum	Standard
					Deviation
Undergraduate CGPA	2.49	2.51	2.08	2.79	.21
Age at Admission Decision	32.7	31.5	22	57	9.8
Years since UG Degree	9.1	7.5	0	27	8.8
Conferral					

#### **Data Analysis**

Students applying for admissions to the MBA program are required to complete an admissions portfolio which consists of an application, a resume, two short essays, two letters of reference and undergraduate transcripts which ideally reflect a CGPA of 2.8 or better. Upon submissions of the portfolio a short admissions interview is completed by a full-time MBA faculty member.

The completed admissions portfolio and documented admissions interview are submitted to the MBA Academic Program Director (APD) for review and an admission decision. An admissions worksheet is completed by the APD for each portfolio reviewed which includes the admission decision. If an applicant's undergraduate CGPA is less than the desired benchmark of 2.8 and the admission decision is positive, the reasons to support this "exception" decision are documented on the worksheet.

The admission work sheets for each of the students included in the sample was obtained and reviewed to identify reasons for accepting the student to the program notwithstanding their

failure to meet the quantitative benchmark of a undergraduate CGPA of 2.8 or better. Reasons were categorized into common themes and collected for each student in the sample. The results were then analyzed to determine trends associated with each student group.

A further analysis using descriptive statistics data was performed for successful and unsuccessful "exception" students to determine whether trends emerged that were associated with exception student success. Lastly, an analysis was conducted to determine whether undergraduate degree, Arts or Sciences, or undergraduate major were associated with successful "exception" students.

#### **Results**

## **Descriptive Statistics**

Comparing descriptive statistics for the successful and the unsuccessful "exception" student provides interesting results. Specifically, undergraduate CGPA is not materially different between these two populations with successful students exhibiting a larger range in undergraduate CGPA but very close median CGPA between the two populations. The other two measures, age at admission decision and number of years since UG degree conferral have larger differences between the two population with the former reflecting a median of ten years and the latter a median of eight years. Table 2 provides details.

A further analysis of successful "exception" students, analyzing the data by the UG CGPA quartile revealed that as the age and years since undergraduate degree conferral increase the undergraduate CGPA decreases. This data is presented in Table 3.

Undergraduate degree was found not to be associated with the success of "exception" students. The Bachelor of Arts degree was earned by 54.5% of the successful "exception" students, versus the Bachelor of Science degree which was earned by 45.5% of these students. The unsuccessful students were evenly split between these two degrees.

An analysis of undergraduate major on the other hand indicated an inverse relationship between the holding of an undergraduate business degree and success for "exception" students. Table 4 provides details. This finding is in contrast to Kass, et al. (2012) but is consistent with Braunstein (2002).

 Table 2

 Descriptive Statistics: "Exception"-Admitted Students

Undergraduate GPA	Successful	Unsuccessful
Mean	2.47	2.53
Median	2.50	2.55
Standard Deviation	0.23	0.16
Minimum	2.08	2.26
Maximum	2.79	2.75
Age at Admission Decision	Successful	Unsuccessful
Mean	34.3	28.2
Median	34	24
Standard Deviation	8.6	11.9

Minimum	22	22
Maximum	48	57
Years since UG Degree Conferral	Successful	Unsuccessful
Mean	10.9	4.1
Median	10	2
Standard Deviation	8.7	7.4
Minimum	0	0
Maximum	27	22

**Table 3**Descriptive Statistics: Successful Students by UG CGPA Quartile

Successful	Age – Mean	Age - Median	Years since UG degree conferral- mean	Years since UG degree conferral- median	UG CGPA Mean	UG CGPA Median
Quartile 1 = UG CGPA < 2.2	39.8	41	17.0	18	2.13	2.13
Quartile 2 = UG CGPA 2.2 to 2.399	41.6	40	16.7	18	2.29	2.28
Quartile 3 = UG CGPA 2.4 to 2.599	33.5	33	8.7	9	2.48	2.50
Quartile 4 = UG CGPA 2.6 to 2.799	29.5	27	7.6	5	2.70	2.71

**Table 4** *Undergraduate Major for "Exception Students"* 

Undergraduate Major		
	Successful	Unsuccessful
# Business Degrees	7	5
# of non-business degrees	15	3
% Business Degrees	31.8%	62.5%
% of non-business degrees	68.2%	37.5%

## Qualitative

The admission worksheet completed for each of the 30 students was analyzed for common reasons/themes which supported the "exception" decision. There were nine reasons applied to exception admission decisions. Definitions of these nine reasons can be found in Appendix 1.

The data was first analyzed to determine the number of reasons, supporting the exception decision, applied to the two groups. As can be seen in Table 5, there were generally more reasons to support the admission decision applied to successful students than those students who were unsuccessful.

**Table 5**Summary: Overall Reason

	Successful	Unsuccessful
Range of reasons cited	1-5	1-3
Mean of reasons cited	2.4	1.5
Median of reasons cited	2	1

Second, a frequency analysis was performed to determine the percent of times each one of the nine reasons was used for making an exception decision for students in each group. Table 6 highlights the frequency of reasons, in order of strength in relationship to success, applied in making the "exception" admission decision.

**Table 6**Frequency of Reasons Applied

Reason	Applied to Successful		Applied to		Relationship
			Unsuccessful		
	Stuc	lents	Stu	dents	
	#	%	#	%	
Length of time since UG degree conferral	11	50.0%	1	12.5%	Positive-High
Professional Success Noted	10	45.5%	1	12.5%	Positive-High
Other grad work	6	27.3%	0	0.0%	Positive-High
Strong references	4	18.2%	0	0.0%	Positive
UG CGPA close to benchmark	4	18.2%	1	12.5%	Positive-Low
Mature/thoughtful	3	13.6%	2	25.0%	Negative-Low
Other UG work	6	27.3%	4	50.0%	Negative
Spoke to applicant	6	27.3%	2	25.0%	Not related
Well written essays	3	13.6%	1	12.5%	Not related
Total Sample	22	100.0%	8	100.0%	

The relationship was determined by calculating the difference between the frequency percentage that a reason was applied to a successful student and the frequency percentage that a reason was applied to an unsuccessful student. The strength of the relationship was assigned in 10 basis point increments. So, a difference between successful and unsuccessful of -4.9 and +4.9 was considered not related, a difference of +5 to +14.9 was considered positive-low relationship, +15 to +24.9 was considered positive relationship, and so on.

#### Discussion

The overall undergraduate CGPA did not differ widely between the successful and the unsuccessful exception students (see Table 1). Age and time since undergraduate degree conferral did vary notably between the two populations with the median age of successful students greater by 10 years than those not successful. Concomitant with this finding was that time since undergraduate degree conferral was eight years greater for successful than unsuccessful students. The reason for the success for the older student, longer away from their undergraduate experience may be the result of maturation and professional experience. As already noted, professional success was a reason that had a high positive relationship to successful "exception" students. Delving deeper into these descriptive statistics for successful students, Table 3 reflects that the older the student and the further they are away from undergraduate degree conferral coincides with a lower undergraduate CGPA. This suggests the undergraduate CGPA has less utility in admission decision making for older students further away from their undergraduate degree conferral. On the other hand, undergraduate CGPA becomes more important as age and time since undergraduate degree conferral decrease.

Undergraduate degree, whether arts or sciences, does not appear to be associated with "exception" student success. The data did, however, reflect that successful "exception" students are more associated with non-business majors. This was consistent with Braunstein (2006) who noted in his study that years since undergraduate degree conferral and work experience were statistically significant for students without an undergraduate business degree.

The qualitative data supports the importance of identifying more rather than less reasons to support exception admission decisions. Reasons used to support exception admission decisions with a Positive-High relationship for successful students included: length of time since undergraduate degree conferral, professional success and other graduate course work. The first two reasons likely emerge as associated with success given the maturation time of the student since their undergraduate career as well as the opportunity to demonstrate through their resume the ability to apply themselves and succeed in the professional world. The third reason, successful completion of other graduate course work, provides an alternative quantitative proxy to the undergraduate CGPA.

Surprisingly, other undergraduate course work was found to be negatively related to successful admission decisions. This reason would be applied to students who may have performed well in business-related course work or had inconsistent but improving grades over their undergraduate career. A further analysis of this finding suggests that this reason is only negatively related to success when used as the sole reason for the exception decision. When this reason was used for successful exception students it was coupled with at least one other reason 67% of the time. On the other hand, when this reason was applied to the unsuccessful group it was used as the sole reason in each case.

The implication of these findings is that it is important to identify more than one reason to support the exception decision and certain reasons have a positive or high positive relationship to successful students, including: time since undergraduate degree conferral, professional success, other graduate work or strong references. The challenge is that younger students are unlikely to possess several of the characteristics which have been found associated with successful exception students. This challenge can be minimized by seeking out as many reasons as possible to support exception decisions, particularly for younger students, nearer to their undergraduate degree conferral.

## **Limitations/Followup**

Some valuable results and trends have emerged from this study, however, there are acknowledged limitations which should be considered. There is a high level of subjectivity in applying some of the reasons to support the admissions. For example, one of the primary reasons associated with successful students was professional success; however, professional success is subjective. What constitutes professional success? This and other reasons that are subjective in nature require a definition to ensure the application of the factor/reason is consistent while recognizing that all subjectivity cannot and should not be removed from the decision-making process.

This study did not assess successful completion of the graduate degree, but rather, success once a certain number of credits had been completed. Further research would look at completion rates of these students versus students who have met the desired quantitative benchmark.

The criteria used in this study are not exhaustive and there could be other criteria which are better associated with success of exception students. This suggests the importance for the admissions office to be open in understanding and considering all aspects of the exception applicant which may be indicative of success at the graduate level. The inclusion of a feedback loop process will allow the admission office to determine the efficacy of reasons used to make these exception decisions and support a continuous improvement in the admissions effort.

Although these findings apply to this specific population at this university they may be applicable to other graduate business programs. It is expected that the concept and broad conclusions drawn from this study are indicative of the need to go beyond the quantitative measures of UG CGPA and GMAT scores when making admissions decisions; conclusions which are applicable to other institutions.

#### Conclusion

The results of this study provide support that there are reasons, as suggested in the literature, beyond the standard quantitative measures which are associated with success at the graduate level (Ahmadi & Raiszadeh, 1997; Hoefer & Gould, 2000; Loucopoulos, et al., 2007; Wright & Palmer, 1994; Yang, 2001). While not exhaustive, the results provide guidance to the admission process in making decisions to accept students who were not academically successful in their undergraduate studies. The importance of this conclusion is confirmed by the 22 successful exception students (73% of the sample) who, had an exception to the desired quantitative benchmark not been made, would not have been able to pursue a graduate degree.

## **Next Steps**

Develop a formal model of admissions criteria including an exception worksheet for students not meeting the quantitative benchmark based on findings from the research. Determine the key items to review and consider when deciding on accepting the "exception" student that meets the requirements of the regional and program accreditor. The model should include a feedback loop whereby the success of "exception" students is assessed on a regular basis for reason efficacy and to ensure continuous process improvement. This will allow a greater mix of rationale for making these exception admission decisions and still result in meeting the accreditor requirements for graduate admissions. This profile should not be considered prescriptive but rather should provide the admissions officer a guide in assessing the likelihood an applicant will be successful at the graduate level of studies. Applicants not fitting this profile

should not be rejected but rather additional reasons and rationale to assess this ability would be required.

The development of more robust, formal definitions for exception reasons is indicated. This is an ongoing process. For example, what constitutes professional success? What about strong references? These should be better defined and formalized so that the admission process can be objective and applied by different people and still yield similar decisions. It is important that even with formalization that room be left to be flexible, to consider different reasons, and to apply reasons in different ways.

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## APPENDIX 1

## **Exception Decision Reasons and Definitions**

Code/Reason	Definition		
Professional Success Noted	Based on a review of the resume or comments		
	included in the essays.		
Length of time since UG degree	If there had been a notable time period (8+ years)		
conferral	since UG degree conferral this comment would be		
	applied.		
Spoke to Applicant	Discussed the nature of poor undergraduate		
	performance and the demands of graduate school. At		
	times asked why the UG performance was not an		
	indicator of the applicant's ability to succeed		
	academically.		
Other UG Course Work	This could mean one of four things:		
	1. The student did well in business course work		
	but not in other course work.		
	2. The student took additional UG course work		
	beyond the degree (perhaps foundational		
	competencies) and did well.		
	3. The student's CGPA was negatively impacted		
	by aberrational grades		
	4. Lower grades early on with progressive		
	improvement.		
Other Grad Work	The student had successfully completed one or more		
	graduate level courses.		
Strong References	Applied when the references provided were notably		
	strong		
UG CGPA close to benchmark	If the UG CGPA was near to the 2.8 benchmark		
	typically no further review was performed.		
Maturity/Thoughtfulness	This comment would come from either a		
	conversation and the assessment of the applicant's		
	comments or from the content of their essay.		
Well written essays	This comment was applied in cases where the essay		
	was particularly well written		