

What Leads to Minority Enrollment into B-School?

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Introduction

According to the Graduate Management Admission Council[®] (GMAC[®]) survey of mba.com registrants (Edgington, 2003), prospective MBA students first consider whether an MBA (or equivalent degree) is right for them and their career goals. Then, they assess their ability to gain admission into graduate business school, finance their education, and find time and energy to devote to their studies. And, finally, prospective students make their school choices (brand-level decision).

This report examines issues weighed by prospective black/African American, Hispanic American, and other minority students as they make the decision of whether to enroll into graduate business school. Like all prospective graduate business students, minority populations evaluate their decisions to apply based on four primary issues (Edgington, 2003)—

- **“Fit”**—Do they feel a graduate management degree will help them achieve their career goals?
- **Preparedness**—Do they feel they have the background and experience to be admitted?
- **Financial Resources**—Do they feel able to finance their degree or reap a return on their investment?
- **Commitment**—Are they willing to meet the challenges and make the personal sacrifices necessary to earn a degree?

Beyond those general considerations, however, is underlying evidence of a more pronounced uncertainty, particularly by African-Americans, in whether or not their success in the business world will be limited by race. Specifically, expressed concerns regarding lack of respect in the workplace and high interest in becoming their own boss suggests a lack of trust in their success in the business world based on personal merit and hard work (Edgington, 2003).

This paper provides a reanalysis of the data gathered from mba.com Registrants Surveys and the Global MBA[®] Graduate Surveys that relate to the four primary issues used to evaluate the decision to apply and eventually matriculate into graduate business programs.

The primary purpose of the original mba.com Registrant Survey was to understand the characteristics and behavior of those in different stages of the decision-making process to pursue graduate management education. The sample selection was drawn from registrants of the GMAC[®] Web site, www.mba.com, who had expressed a willingness to participate in GMAC[®] research. These registrants were randomly drawn from a group that had registered between September 1, 2002 and September 1, 2003. A total of 10,029 people completed the survey—a response rate of 27%. Seventy-one percent of the U.S. respondents were white, 13% were black/African American, 7% were Hispanic American, 7% were Asian American, and 1% were Native American Indian/Alaskan Native.

Significance testing was conducted to determine whether observations from this survey could generalize to the sampled populations. Each of the four primary issues—fit, preparation, financial resources, and commitment—are examined in detail for U.S. minority respondents. Differences between groups are noted. Chi-square analysis was used to evaluate the statistical significance in cross-classification tables ($p < 0.05$). That is, a relationship between a topical item and a classification item was considered statistically significant only when it could have been produced by chance less than 5% of the time. T-tests, analysis of variance, and nonparametric tests were used whenever appropriate.

Issues of “Fit”

Issues of “fit” encompass both motivations and culture, which are factors of relevance to all prospective graduate students examining education programs. Typically, issues of fit refer to the ability of the degree and graduate program to help students achieve their career goals as well as whether the cultural environment in the program and the associated professions will match the students’ needs and/or preferences. Prospective minority graduate business students may also be evaluating whether educational institutions and the business world will be open to their unique backgrounds and experiences.

The mba.com Registrants Survey (Edgington, 2003) asked respondents to indicate the reasons for deciding to enter a graduate management program. The top three reasons indicated for deciding to enter a graduate management program, regardless of U.S. subgroup affiliation, were to remain marketable, improve long-term income and financial stability, and to gain personal satisfaction and achievement.

As the following table shows, of the top three reasons given, gaining personal satisfaction and achievement may be of particular relevance to many African-Americans based on their more pronounced uncertainty, as a group, regarding success.

Table 1: Reasons to Enter a Graduate Management Program, by U.S. Subgroup (Mean)*

How true are the following reasons for entering a graduate management program for you? It will...	Asian American (n = 106)	Black/African American (n = 149)	White (n = 938)	Hispanic (n = 85)
Allow me to remain marketable (competitive)*	2.38	2.56	2.25	2.35
Give me a sense of personal satisfaction and achievement*	2.37	2.53	2.21	2.46
Improve my long term income and financial stability	2.34	2.46	2.32	2.35
Develop my management knowledge and technical skills*	2.40	2.38	2.15	2.21
Be an exciting challenge*	2.07	2.07	1.81	2.25
Prepare me to get a good job in the business world*	1.88	1.88	1.64	2.00
Provide the specific skills I need to do my job and get ahead*	1.75	1.88	1.58	1.84
Provide the right connections for getting a good job*	1.90	1.76	1.45	1.91
Prepare me to start or manage my own business*	1.20	1.56	0.41	0.61
Increase my short-term earning power*	1.28	1.38	0.86	1.31
Allow me to change current occupation*	1.51	1.35	0.76	1.24
Allow me to switch industries*	1.53	1.12	0.68	1.15
Be looked upon favorably by people important to me*	1.27	0.66	0.89	1.05
To gain valuable experience before re-entering the job market*	1.30	0.43	-0.09	0.64
Allow me to build on a non-business undergraduate degree *	0.93	0.39	0.00	0.05
Prepare me to seek international employment *	0.78	0.07	-0.44	0.36

* $X^2 = 0.000$; $df = 4,133$; Scale: (+3) True to (-3) False

Respondents to the mba.com Registrants Survey (Edgington, 2003) were also asked to indicate how real they feel the “glass ceiling” is in business on a 5 point scale from 0 (lowest) to 5 (highest). Blacks/African Americans (3.3) were slightly (but significantly,

$X^2 = 0.000$, $df = 4,133$) more likely than Asian Americans (3.1), whites (3.0), and Hispanic Americans (3.1) to consider the “glass ceiling” to be “very real” in business.

Perceptions surrounding the existence of a “glass ceiling” may be related to personal experiences in the workplace. Blacks/African Americans (12%) are more likely than whites (2%) to state they did not get the respect at work that they deserved as an event that prompted them to apply.

The combined data from the GMAC® Global MBA® Graduate Surveys 2000-2005 found significant differences in how minorities feel an MBA will increase

their career options. But, the three most-cited reasons, regardless of U.S. subgroup affiliation, are increasing long-term potential through the development of management knowledge and technical skills, remaining marketable, and changing occupation. Table I shows the significant differences by U.S. subgroup on the ways they report an MBA will increase their career options.

Table I: Ways an MBA Increases Career Options, by U.S. Subgroup*

	Asian American (n = 764)	Black/African American (n = 409)	White (n = 7,693)	Hispanic (n = 382)
Increase in long-term potential through development of management knowledge/technical skills	62%	59%	60%	56%
Allow a career transition—use the MBA to change from current occupational area to a specific new one	46%	41%	46%	49%
Allow you to remain marketable (competitive)	46%	58%	45%	48%
Allow you to expand the number of organizations with which you can seek employment	31%	25%	34%	30%
Prepare you to seek international employment	31%	25%	34%	30%
Preparation to starting own business	27%	40%	22%	22%
Allow you to make a transition from a non-business undergraduate degree	20%	15%	21%	21%
Increase the chances of promotion where you currently work	12%	11%	17%	14%
* X ² = 0.000; df = 9,244				

Cultural fit, though harder to quantify, may be equally important. Within a campus culture, the most obvious elements of fit relate to program diversity and student interactions, which combine to create campus climate. Many minority respondents to the Global MBA® Graduate Survey 2004 (Edgington, 2004) cite the importance of diverse faculty and students in their school of choice (X² = 0.000; df = 7,760). Of the respondents, 47% of whites, 58% of African-Americans, 65% of Hispanic Americans, and 66% of Asians listed faculty and student diversity as either extremely or very important. Diversity is particularly important to campus climate, as research shows that lack of diversity in the student population, faculty, staff, and curriculum often restrict the

nature and quality of minority student interactions in and out of the classroom and threaten their academic performance and social experience (Swaile, Redd, & Perna, 2003).

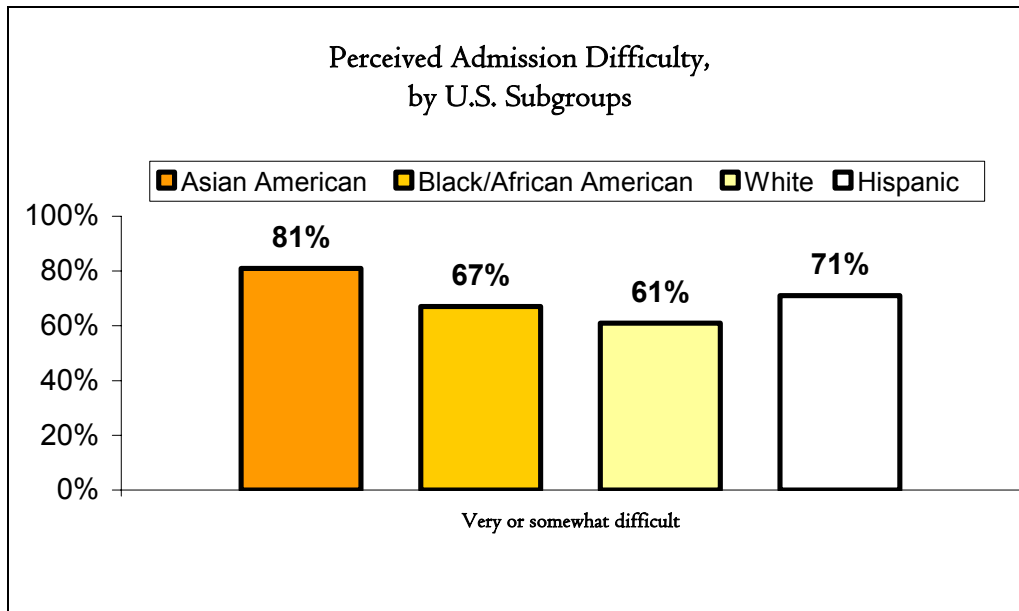
Issues of Preparedness

As prospective students weigh the potential outcomes and experiences associated with a graduate business program and further consider enrollment, issues of preparedness become a factor. Issues of preparedness refer to how well students believe they are academically ready to meet the requirements for admission. In this study, preparedness is partially gauged by previous academic experience and

scores on admissions tests—the typical admission criteria used by graduate business schools.

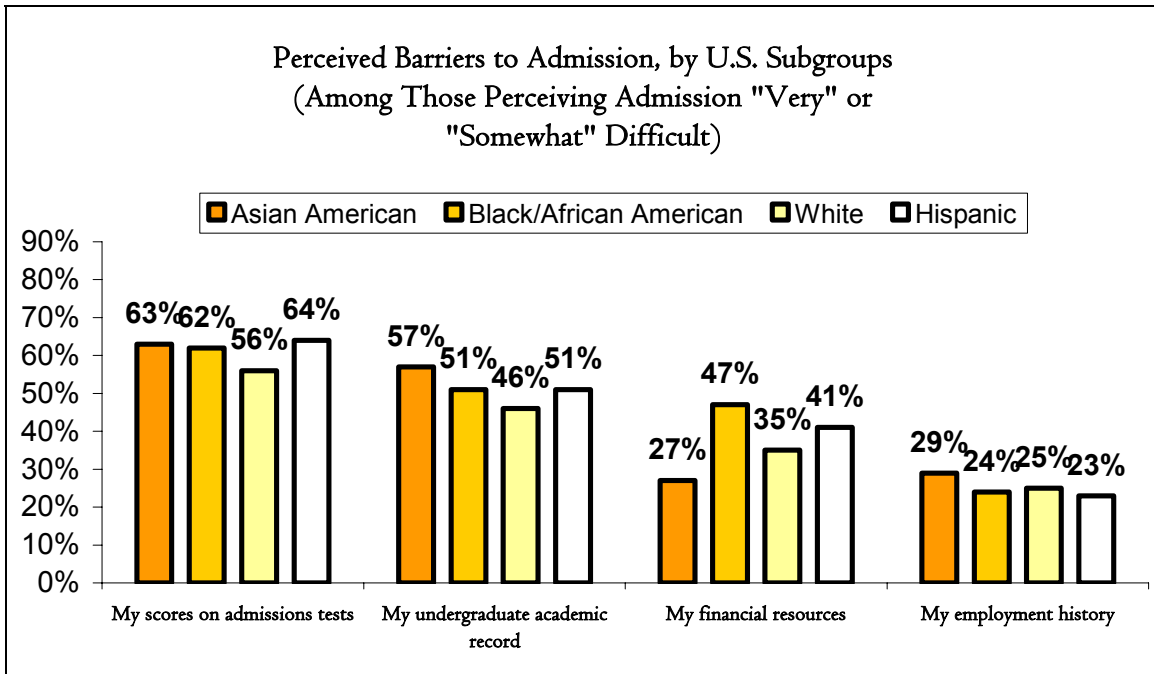
Perceived difficulty in gaining admission into graduate business schools was significantly different among U.S. subgroups ($X^2 = 0.000$; $df = 3,304$). As the following

chart shows, Asian and Hispanic American respondents were more likely than black/African American and white respondents to feel it would be very difficult to be admitted into their school of choice.



Respondents who thought that it would be very or somewhat difficult to be admitted to their school of choice were asked to indicate their strongest potential barriers to admission. Regardless of U.S. subgroup

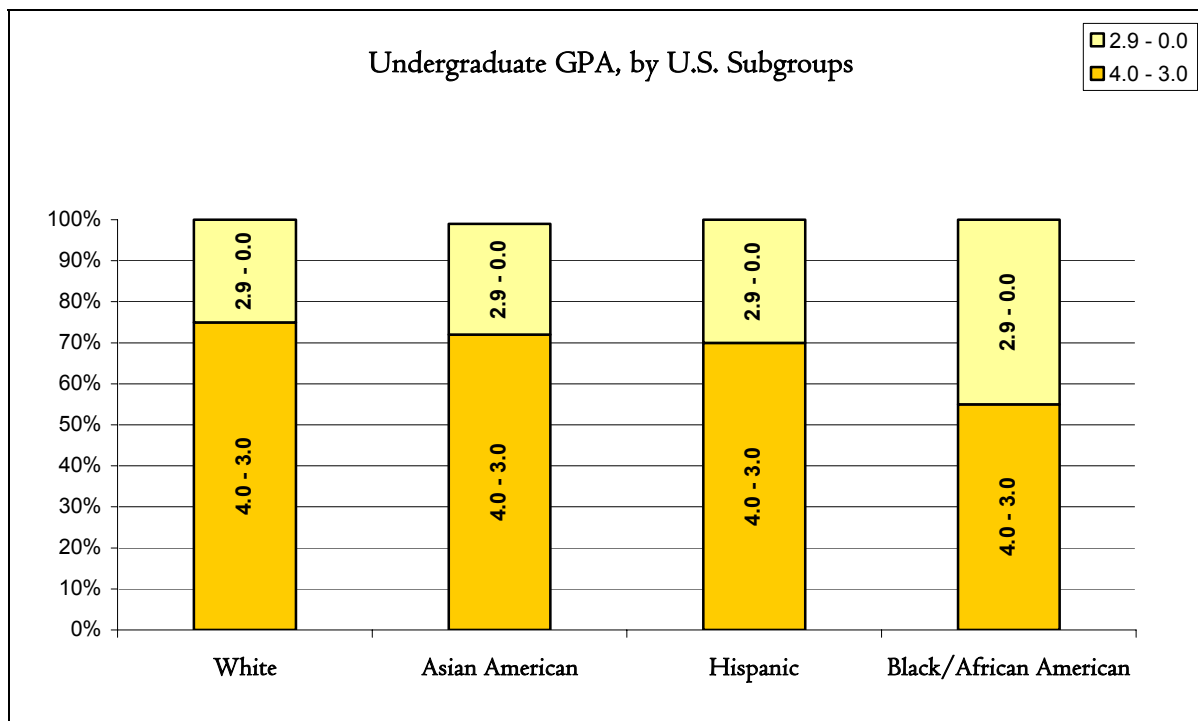
affiliation, the most-cited potential barriers were scores on admissions tests, undergraduate academic record, financial resources, and employment history.



Combined responses indicate that black/African American respondents were the most concerned about barriers to admission based on preparedness, followed by Hispanic American, Asian American, and white respondents, respectively.

Some of those concerns may be justified. If we look at undergraduate GPAs for GMAT® test takers in 2003/04, we find that 45% of African American GMAT® test takers report GPAs in the 2.9 and lower range, a greater percentage than for other U.S. subgroups, as shown in the following table.

Yet another barrier may be created when perceptions of preparedness differ from reality. For example, Asian American GMAT® test takers are the most likely to list undergraduate record as a perceived barrier to admission, but Asian Americans report the highest minority percentage of GPAs in the 3.0 to 4.0 range, with nearly the same percentage as whites in that range.

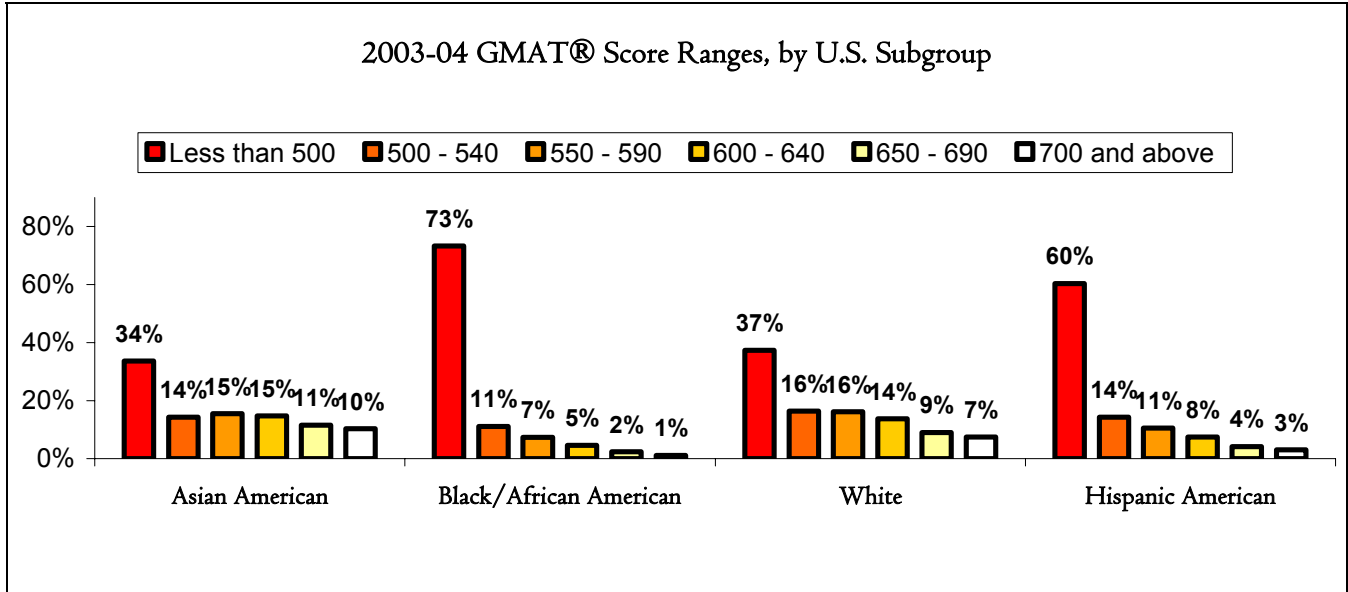


The lower undergraduate GPAs reported by black/African American GMAT® test takers could be partially attributed to disadvantages in the education system. Blacks/African Americans are more likely than whites to attend poor, urban schools than the more affluent suburban schools. Students who attend more affluent schools often have access to superior secondary education with more rigorous academic tracks to prepare for college. We find evidence of this more intensive preparation in scores on college admissions tests, such as the SAT. The College Board reports a 204-point difference in the combined average SAT verbal and math scores between whites (1068) and blacks (864) (Lyons, 2005).

However, we can assume that prospective graduate business students are more prepared for the academic challenges of the program than the general population. To meet the requirements necessary for application to graduate business schools, prospective minority students must have already overcome most early disadvantages in the process of completing high school and undergraduate

degree programs, but if the course work taken prior to graduate business school is not extensive enough for MBA coursework, such as calculus, they may still struggle.

GMAT® scores are another assessment of preparedness and another area where perceptions may differ from reality. Of those who listed admission to graduate business programs as very or somewhat difficult, scores on admission tests were closely cited by the respondents of three major U.S. subgroups—Hispanic Americans (64%), Asian Americans (63%), and blacks/African Americans (62%). GMAT® score ranges over the last year do validate some their concerns, the following chart shows that a greater proportion of underrepresented minorities score in the lower ranges than whites. Here again we find that expressed concerns do not always align with reality. Asian American respondents actually score better on the GMAT® exam than white respondents, who reported the least concern regarding admission tests as a barrier. Black/African American and Hispanic American respondents were at the bottom of the score ranges.



Issues of Financial Resources

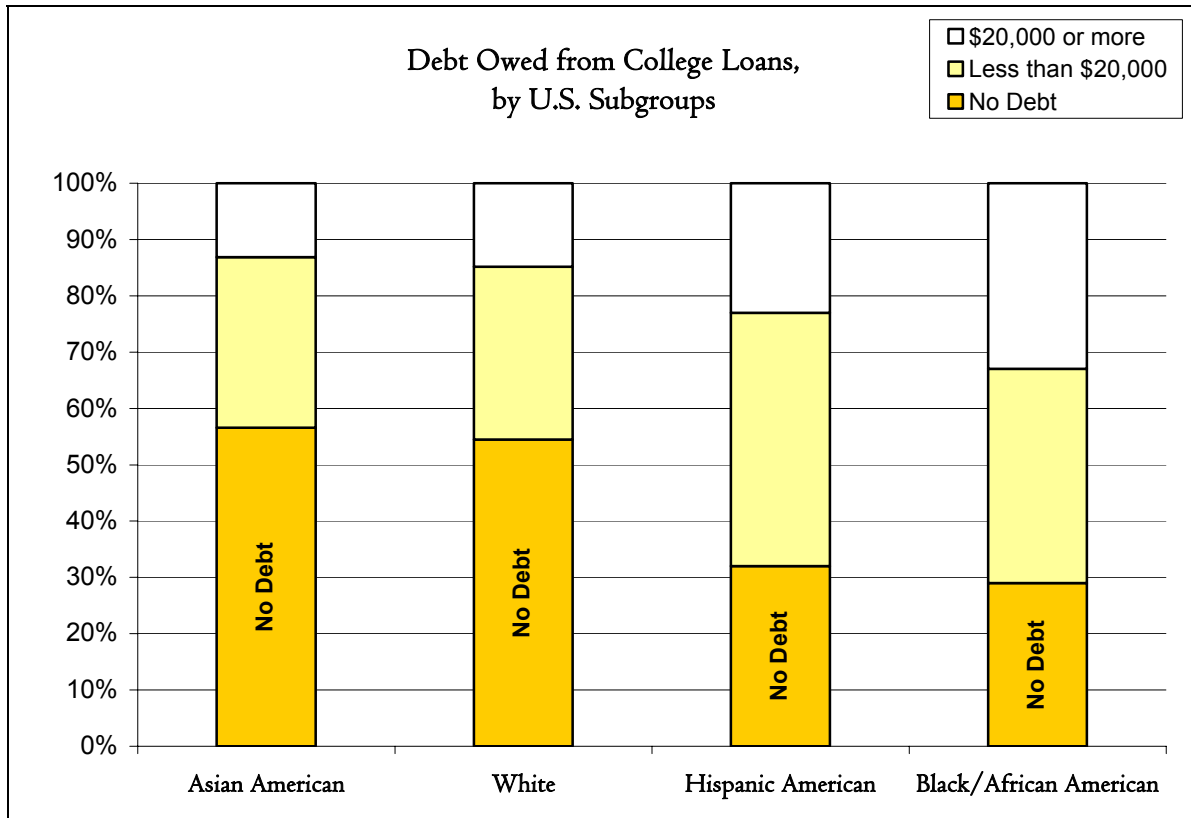
Aside from fit and preparedness are issues associated with securing financial resources. Financial investments in graduate business school can be extensive, and, as such, financial concerns may deter prospective students from applying. According to the 2003 mba.com Registrants Survey (Edgington, 2003), two-thirds of black/African American respondents (67%) who decided not to attend graduate business school stated that it would require more money than they are willing to invest, which is significantly higher compared with whites (11%) ($X^2 = 0.012$, $df = 50$).

A prospective student's ability (both perceived and actual) to finance their graduate management education is critical to their decision to pursue it. Nearly half (46%) of the respondents who felt it would be difficult to be admitted into graduate business school cited their financial resources as a potential barrier.

Two types of financial barriers exist. One relates to cash constraints, i.e., the cost is beyond their present means.

The other relates to cost-benefit analysis, i.e., the cost is too high relative to the benefit received. The first type of financial barrier can be alleviated through financial assistance. It is important to note, however, that underrepresented minorities may be more likely to still carry large debt from their undergraduate or other graduate education at the time they are considering and would pursue graduate management education.

The amount of debt owed from previous education (undergraduate or other graduate) was significantly different among U.S. subgroups ($X^2 = 0.000$; $df = 3.624$) who had responded to the mba.com Registrants Survey 2003. Black/African American (71%) and Hispanic American (68%) respondents were notably more likely to report having debt than white (45%) and Asian American (44%) respondents. Black/African American respondents were also more likely than other U.S. subgroups respondents to have \$20,000 or more debt. Hispanic American respondents were more likely than Asian American and white respondents to have \$20,000 or more debt.



Based on the existence of such debt among blacks/African Americans and Hispanic Americans and Hispanic Americans, financial assistance in the form of loans may be unattractive. Non-debt options, such as grants, work-study, or lower tuition would be more enticing in that scenario and would also provide a more positive cost-benefit analysis. It is no wonder, then,

that black/African American and Hispanic American respondents were more likely than respondents from other U.S. subgroups to indicate that non-debt options would be their one main source of financing.

Table 3: Principal Way of Financing MBA Education, by U.S. Subgroup

	Asian American (n = 573)	Black/African American (n = 266)	White (n = 5,377)	Hispanic (n = 250)
Loans	47%	47%	44%	46%
Grants/fellowships/scholarships/ government benefits*	9%	28%	11%	29%
Employer sponsorship	15%	17%	21%	13%
Personal earnings	6%	4%	7%	4%
Support from Parents	10%	2%	8%	4%
Spouse's (partner's) earnings	11%	1%	7%	4%

* $X^2 = 0.000$; $df = 3,589$

An inability to obtain expected grants could lead to decisions not to pursue graduate management education. Past survey research on MBA graduates, the Global MBA® Graduate Survey (Edgington, 2003), found that the amount of financial aid extended was significantly more important to black/African American and Hispanic American respondents in deciding which school to attend. This reliance on grants is especially noteworthy because grants are the most uncertain source for financing a graduate management education.

Commitment

Whether prospective graduate business students are willing to make personal sacrifices in the pursuit of a degree in graduate business is another factor in whether they matriculate in a program. What we know about minority academic preparedness and financial resources suggests that blacks/African Americans and Hispanic Americans may perceive that a larger commitment is required for success in a graduate business program.

Overcoming academic preparedness issues requires more study time, which results in less time with loved ones. Overcoming lower financial resources may require potentially larger debts or working more while attending school, which also results in a greater time commitment.

Both demand time and energy and can increase stress levels, which may adversely affect performance in the program.

Matriculation Decision

It is no wonder that, given what we know about the barriers to matriculation, minorities proceed through the pipeline to graduate business school at a slower pace. A greater proportion of black/African American respondents take longer to decide whether graduate business school is right for them (52% took two years or longer compared to 46% of Asian Americans and 42% of whites and Hispanic Americans).

Black/African American respondents who had already applied to graduate business schools at the time of the October 2003 registrants survey were significantly less likely to be enrolled in an MBA program one year later, 61% compared with 86% of whites, 83% of Asian Americans, and 82% of Hispanics who are currently enrolled (Schoenfeld & Edgington, 2005). Instead, black/African American and Hispanic American respondents were more likely to have postponed or withdrawn from the business school pipeline (16% compared to 9% of Asian Americans and 12% of whites).

Table 4: Percent Currently Enrolled in October 2004, by Status in October 2003 (U.S. Subgroup)*		
	Response in October 2003	
	Applied	Plan to Apply
Asian American	83%	32%
Black/African American	61%	22%
White	86%	32%
Hispanic	82%	24%
* $\chi^2 = 0.000$; $df = 12$		

Demographic Percentages of Respondents Entering an MBA Program

Blacks/African Americans

- Of the blacks/African Americans surveyed, 52% were women. This diverts significantly from the percentage of women in other subgroups, (Asian American: 41%, White: 34%, and Hispanic American: 35%).
- 72% reported being in a full-time MBA program, which is significantly higher than whites (67%).
- 31% are married, significantly lower than whites (50%)
- Blacks/African Americans considering or in an MBA are the most likely to be 35 and over
- Significantly more black/African American respondents have parents who did not graduate from college (38%) in comparison to whites (23%) and Asian Americans (22%).

Hispanic Americans

- Of the Hispanic Americans surveyed, 65% were men, which does not divert significantly from the percentage of Asian American and white men
- 75% reported being in a full-time MBA program, which is significantly higher than whites (67%).
- 39% are married, significantly lower than whites (50%)
- The majority of Hispanic Americans considering or in an MBA tend to be in the 28-34 age group (55%)
- Significantly More Hispanic American respondents have parents who did not graduate from college (38%) in comparison to whites (23%) and Asian Americans (22%).

Conclusion

Minorities clearly encounter potential barriers in their pursuit of graduate business education, but the minority presence in both the undergraduate and graduate levels of business education appears to be improving. The number of minority bachelor's degrees earned in business increased by 29,000 between 1991-1992 and 2001-02, an increase of 77%. Whites, on the other hand, earned 10,000 fewer bachelor's degrees in business—a drop of 5%—during the same timeframe. For blacks/African Americans, the largest numerical growth in bachelor's degrees earned from 1991-92 to 2001-02 occurred in business, increasing by close to 10,000 degrees. The largest numerical increase in bachelor's degrees earned by Hispanic Americans also occurred in business, with an increase of 9,000 degrees in the last decade.

Blacks/African Americans and Hispanic Americans more than doubled their number of master's degrees in business. Blacks/African Americans had one of the largest numerical gains in master's degrees conferred in business, with more than 6,000 additional degrees conferred during the last decade.

The evidence leaves no question that advances are being made, but there remains room for improvement. Fortunately, the wheels are already in motion. Based on the data gathered to date, it appears that graduate business programs can expect that each improvement made will work to encourage further improvements. The more schools recruit minorities into their programs and increase minority representation in the curriculum, the better the program diversity will become, which will have a positive effect on the attractiveness of their program to future minority students. Plus, the more minorities to graduate from graduate business programs, the more minority MBAs there will be in the world of business to whittle away at misconceptions and make changes where inequalities may exist.

For more information about minority recruitment strategies for graduate business programs, refer to Research Report RR-05-10, on minority outreach strategies.

Contact Information

For questions or comments regarding study findings, methodology or data, please contact the GMAC® R & D department at research@gmac.com.

Acknowledgements

Naomi Marshall, Research Assistant, Management Education Research Institute.

References

- Edgington, R. (2003). Global MBA® Graduate Survey Executive Summary 2003. Graduate Management Admission Council®. Available at <http://www.gmac.com/gmac/ResearchandTrends/SurveyResearch/GlobalMBAGraduateSurvey.htm>.
- Edgington, R. (2003). Mba.com Registrants Survey Executive Summary 2003. Graduate Management Admission Council®. Available at <http://www.gmac.com/gmac/ResearchandTrends/SurveyResearch/RegistrantsSurvey.htm>.
- Edgington, R. (2003). Mba.com Registrants Survey Overall Report 2003. Graduate Management Admission Council®. Available at <http://www.gmac.com/gmac/ResearchandTrends/SurveyResearch/RegistrantsSurvey.htm>.
- Lyons, L. (2005). "Blacks: Whites Have Advantage in College Admissions." Gallup Poll News Service. Retrieved September 13, 2005 from <http://poll.gallup.com/analyses/educaYouth/>.
- Schoenfeld, G. & Edgington, R. (2005). Mba.com Registrants Follow-Up Survey Executive Summary 2004. Graduate Management Admission Council®. Available at <http://www.gmac.com/gmac/ResearchandTrends/SurveyResearch/RegistrantsSurvey.htm>.
- Swail W.S., Redd K.E., & Perna L.W. (2003). Retaining Minority Students in Higher Education: A Framework for Success. In Kezar A.J. (Series Ed.), ASHE-ERIC Higher Education Reports: Vol. 30, No. 2. San Francisco, CA: Jossey-Bass

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