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By: Bradford R. Frazier, Carlton C. Young, and **David R. Williams**

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The present study examines non-traditional, adult graduate students' demographic profile, and relates this to their enrollment in a master's degree program of study. We survey 407 students enrolled in either a master of business, healthcare, leadership, or a combination program offered by a Southern university at two different campuses. Our findings show greater diversity than earlier research: MHA students had a demographic profile indicating that they enrolled in their graduate program when, on average, they were older as compared to students in the other graduate programs at the university; and the MHA students reported average incomes higher than the students in other graduate programs, with MBA students entering at an earlier age, and earlier in their career when compared to the other programs. Our findings are useful to academicians and employers wanting to discern the demographic profile of non-traditional healthcare and business graduate students, and how this relates to their program of study.

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The present study examines non-traditional, adult graduate students' demographic profile, and relates this to their enrollment in a master's degree program of study. We survey 407 students enrolled in either a master of business, healthcare, leadership, or a combination program offered by a Southern university at two different campuses. Our findings show greater diversity than earlier research: MHA students had a demographic profile indicating that they enrolled in their graduate program when, on average, they were older as compared to students in the other graduate programs at the university; and the MHA students reported average incomes higher than the students in other graduate programs, with MBA students entering at an earlier age, and earlier in their career when compared to the other programs.. Our findings are useful to academicians and employers wanting to discern the demographic profile of non-traditional healthcare and business graduate students, and how this relates to their program of study.

Introduction

According to the American Council on Education, it is estimated that more than 40 percent of students enrolled in degree granting programs in higher education are non-traditional, adult students, age 25 or older (Paulson & Boeke, 2006). Of these students, 6 million are entering graduate school as working adults. Yet, there has been surprisingly little research done on understanding

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the demographics and profiles of the working adult graduate student (Aslanian, 2001), or their choice of program of study. This research is needed as these students have a noticeably different profile than those students pursuing a graduate degree immediately following completion of an undergraduate degree, with an increasing number of colleges offering courses and programs aimed at non-traditional students. Related to this, in the health administration education field, a debate has ensued regarding the value of having a Master of Health Administration (MHA) degree compared with the value of having a Master of Business Administration (MBA) degree.

The primary motivation for this study is to investigate the potential relationship(s) among student demographics and the program of study of adults entering an evening graduate healthcare administration or business degree program. Understanding the demographics and profiles of these adult students is useful information for university administrators and program directors that would allow them to concentrate their marketing and recruitment efforts where the greatest potential lies, and better understand student types that may be underrepresented or missing. It could also allow faculty responsible for instruction to better craft the curriculum to meet the needs of this population. This knowledge of student profile may shed light on the issue of what kinds of students value an MHA degree compared with an MBA degree.

In addition, it may allow employers to distinguish which types of employees are seeking additional education, what the managerial workforce may look like in the future, and how the healthcare industry may differ from industries at large. Thus, the specific goals of this study are to (a) identify and put forth a profile of these adult students and their characteristics, and (b) explore the demographics on these students.

To gather data for our study, we surveyed all non-traditional adult graduate students in the College of Business at a **Southern Association of Colleges and Schools** accredited private university with an established academic reputation (in excess of one hundred years) pursuing a program of study of either a Master of Health Administration (MHA), Master of Business Administration (MBA), Master of Science in Leadership and Organizational Change (MSL), MBA+MHA combination, or MBA+MSL combination with respect to personal demographics. We then used multinomial logistic regression (MLR) to identify potential relationships among demographic factors and the program of study (e.g. MHA, MBA, MSL). By examining these data, we add to the body of knowledge regarding adult student profiles and their programs of study that have been overlooked in previous research, and specifically related to students pursuing education in healthcare management or business administration.

Literature Review

As early as the 1960s, researchers began to realize there was a difference between traditional and non-traditional college students. Houle (1961) was the first to identify differing motivations of adult students. These orientations were named "Houle's Typology." Prior to Houle's research, no previous research examined constructs outside the field of education (Courtney, 1992). The majority of work by other researchers on adult students extended Houle's work on motivational factors. These relate to factors such as intrinsic and extrinsic motivation (Deci, 1971; Vallerand, 1997), the interaction of participants (Grotelueschen & Caulley, 1977), and the "chain of responses" (Cross, 1981), but are not of direct interest to the present study.

Fottler and Lee (2007, p. 184) noted the transformation in health administration education with their conclusion that "our field is currently undergoing significant change as a shift occurs from programs serving traditional full-time students to non-traditional programs including executive, part-time, distance-learning formats." As the overall number of non-traditional students began to grow, interest increased in identifying traits and profiles of the non-traditional student (Courtney, 1992).

One of the first studies on this subject is by Aslanian and Brickell (1980). They studied nearly 2,000 students age 25 and older currently involved in continuing education as non-traditional students. While the focus of the study was to indentify triggers resulting in adults continuing their education, there also was significant information on the profiles of these students. Findings from the study indicated that the largest percentage of non-traditional students were age 25 to 39 (50 percent), and age 40-59 (29 percent). Marital status revealed 67 percent of the students were married, 20 percentt were divorced or separated, 9 percent were widowed, and 12 percent were single. Number of children showed 23 percent had no children at home, 16 percent had one child, 26 percent had two children, and 33 percent had three or more children. Race was largely white (87 percent), with 8 percent black, 2 percent Hispanic, and 2 percent other. Sex was fairly evenly split with 48 percent male and 52 percent female.

Building on the previous study, Aslanian (2001) surveyed 1,500 adults aged 25 or older that were involved in continuing education as a non-traditional student. In this study, graduate adult students were separated yielding specific results for this non-traditional segment. These results indicated that 19 percent of the students were age 25-29, 15 percent were 30-34, 15 percent were 35-39, 20 percent were 40-44, 15 percent were 45-49, 15 percent were 50-54, and 4 percent were 55 or older. There were 69 percent females and 31 percent males, and

90 percent were white with 3 percent African American, and 6 percent other. The respondents indicated marital status of 67 percent married, 24 percent single, 8 percent divorced, and 1 percent widowed.

More recently, The National Center for Educational Statistics surveyed more than 17,000 adults enrolled in a university or degree program for work related reasons, although the sample was not segmented to show only students in graduate school (O'Donnell, 2005). Demographic factors for this group showed the majority of students (49.4 percent) were age 16-24, 27.7 percent were 25-34, and 22.9 percent were 35-64. Gender was relatively even with 44.3 percent males and 55.7 percent females. Race indicated 70.2 percent white, 12.7 percent black, and 17.1 percent other. From the respondents, 33.3 percent were married, and 60.8 percent were single or unmarried living with a partner and 5.8 percent were widowed. Finally, 79 percent indicated having no children.

Similarly, the American Council on Education captured demographic and other data on adult learners (Paulson & Boeke, 2006). This longitudinal study indicated that adult learners were expected to grow from 28 percent of the student population in 1970 to a projected 40 percent in 2014. Full time graduate students age 25 or older grew from 20.2 percent of the US student population in 1970 to 28.7 percent in 2002, while part-time graduate students age 25 or older held relatively steady from 52.0 percent to 49.4 percent. Adult college students in general have also changed. In 1970, females age 25 or older were 10.2 percent of the student population but are projected to be 24.0 percent in 2010. Male students age 25 or older were 17.6 percent of the student population in 1970 but are projected to be 14.8 percent in 2010. Ethnicity has also changed over time. Students age 25 or older in 1964 were 1 percent African American and 15.6 percent were white of the total student population. This increased to 6.6 percent and 31.5 percent, respectively, in 2002. Overall, the research shows a changing demographic mix in adult students.

Within the domain of health administration education, gender differences and preferences have been observed by previous scholars. For example, Lee and Fottler (2007, p. 194) find that "[f]emales predominate in both types of programs although this difference is more pronounced in the traditional programs where females account for 64 percent of enrolled students." A further understanding of these gender differences will allow for better adapting pedagogies to student characteristics.

To this end, The Association to Advance Collegiate Schools of Business (AACSB) and The Association of University Programs in Health Administration (AUPHA) both recently surveyed their member programs related to demographics of their Master of Business Administration (AACSB) or Master of Health Administration or equivalent (AUPHA) programs. The AACSB (2010) sample included 427 programs with a total sample of 157,249 students. The

AUPHA (2010) sample included 124 programs representing 8,359 students. For AACSB, their findings show that their MBA students are: 63.2 percent male compared with 36.8 percent female; 63.8 percent are white, with 7.4 percent being African-American and 10.3 percent are Asian; and 53.7 percent are part-time compared with 33.2 percent being full-time (13.1 percent report "Other"). For AUPHA, their findings show that their MHA (or equivalent students) are: 43.9 percent male compared with 56.1 percent female; more than 50 percent are white, with less than 20 percent being African-American and fewer than 10 percent are Asian (AUPHA provides charts without data for Race; therefore, these Race data are approximation.).

While each of these studies' demographic data on students is interesting, most do not specifically target working non-traditional adults returning to graduate school, and none specifically focus on the non-traditional adult student who is seeking a master's degree in a healthcare administration or business related field. However, there are initial indications that increasing attention is being brought to bear on non-traditional students in graduate health administration education programs as confirmed by Stoskopf, Xirasagar, Han, and Snowden's (2007, p. 301) finding that "[t]here is a demand for non-traditional doctoral education in healthcare management." In addition, Hernandez and Shewchuk (2010, p. 250) observe: "Our field will be able to reach many non-traditional students... As traditional programs seek these new markets for their courses, it is critical for faculty to receive instruction in techniques that will help them communicate more effectively with their students…" Thus, additional research is needed to identify specific traits found in this non-traditional population segment and relate them to programs of study.

Methodology

As the study's overall interest is in understanding the demographic profile and in discerning if there are differences between the demographic profile and the program of study of adults enrolling in an evening graduate degree program, a survey was conducted in 2009 on enrolled adult students currently attending an evening graduate degree program at a Southern university, within a school of business. The university is accredited by the Southern Association of Colleges and Schools, but neither the school of business nor any of its masters' programs are accredited. The university offers five degrees: Master of Health Administration (MHA), Master of Business Administration (MBA), Master of Science in Leadership and Organizational Change (MSL), and two combination dual degrees of MBA/MHA, and MBA/MSL, all within a School of Business.

All five of this school of business' graduate degrees are part-time, evening programs and are offered on two campuses located in two different metropolitan areas. One of the campuses is located in a metropolitan statistical area

(MSA) with more than one and a half million people living in it, with the other campus located in a MSA exceeding one million people. The MSAs are both growing substantially and are service-oriented economies, with banking and healthcare being the two prominent drivers of these economies. The university does not have a full-time master's degree program. The MBA, MHA, and MSL degree are 36-hour master's degrees and the MBA/MHA and MBA/MSL degrees are 54-hour programs. Students attend classes in the evenings and/or online and typically take a load of two courses per semester, three semesters per year. With this schedule, students are able to complete an MBA, MHA, or MSL degree in 24 calendar months, and the MBA/MHA or MBA/MSL dual degrees in 36 months. Students in these programs may speed up or slow down their progress; however, they are allowed no more than seven years to complete their program.

For the study's demographic profile we follow Creswell (2007) and include: gender, age, marital status, race, ethnicity, income level, and number of children currently in the household. For our multinomial logistic regression, we used the above variables for the demographic profile as our independent variables. The dependent variable was the program of study (e.g. MHA, MBA, MSL, or combination). Respondents self-reported their program of study and demographic information.

A multinomial logistic regression (MLR) was used to test for potential relationships among demographic variables and the likelihood of choosing the MBA, MHA, MBA/MHA, or MBA and MBA/MSL graduate programs. Multinomial logistic regression is useful for analysis in which one wants to be able to classify subjects based on values of a set of indicator variables (Spicer, 2005). MLR is similar to logistic regression, but it is more general because the dependent variable is not restricted to two categories. Wright (1995) recommends a minimum of 50 cases per independent variable for reliable results using MLR. The MSL and MBA/MSL categories had fewer than 50 respondents each (31 and 30, respectively) and were, therefore, combined into a single variable called MSL for this analysis. In using MLR, the researcher must choose a base category for each analysis. With the dependent variable (e.g. program of study), there are four categories. Using MBA as the base category in the first analysis, we analyzed the comparisons of MBA vs. MHA, MBA vs. MSL, and MBA vs. MBA/MHA. The next analysis was run with MHA as the base category giving the analysis of MHA vs. MSL, and MHA vs. MBA/MHA. The final run selected MSL as the base category, which gave the analysis of MSL vs. MBA/MHA. These multiple iterations allowed the examination of the six comparisons possible within four categories of the dependent variable.

Results

DESCRIPTIVE CHARACTERISTICS

The final number of students participating in the study was 407. All of the 407 surveys returned were complete and useable. At the time of this study, there were 652 students enrolled in one of the five graduate degree programs at the university included in this study. This yielded a response or capture rate of 62.4 percent. All of the respondents were students pursuing a Masters of Health Administration, Masters of Business Administration, Masters of Science in Leadership and Organizational Change, Masters of Business Administration/Master of Health Administration, or Masters of Business Administration/Masters of Science in Leadership and Organizational Change degree.

Table 1 details the demographic characteristics of the sample. The sample consisted of 118 males and 289 females. The majority of the respondents (339) fell in the age groups between 26 and 50. The variable "marital status" revealed 137 were single, 213 were married, and 54 were divorced. The racial makeup of the sample consisted of 205 white students (50.4 percent), 185 black or African-American students (45.5 percent), and 17 Asian students (4.2 percent). The vast majority of the sample (98 percent) was reported as non-Hispanic ethnicity. The sample most frequently reported income between $40,001 and $60,000 (29.2 percent), followed by $60,001 to $80,000 (19.0 percent). The largest percentage of the sample (46.9 percent) had no children at home. Homes with one or two children were reported in 20.6 percent and 20.9 percent of the sample, respectively, and 11.6 percent of the sample reported three or more children in the home. Finally, the sample consisted of 143 MBA's, 123 MHA's, 31 MSL's, 80 MBA/MHA's, and 30 MBA/MSL's.

Descriptive statistics were also used to examine any differences in the sample by gender. The program of study variable was compared by gender to determine the profile of students for each program. Table 2 shows these results and demonstrates that the MBA consists of a larger percentage of males and the MHA and MBA/MHA has a larger percentage of females. The other programs are fairly evenly spread among males and females. Although somewhat more pronounced, this is consistent with AUPHA and AACSB's findings, as previously noted.

In Table 3 we examined the demographic variables by program to determine if there were any significant differences across demographics. Age was evenly distributed across programs with no significant differences. In all five programs, most students ranged in age from 22 to 50. The MBA had the highest concentration (22.3 percent) of students in the age range 26-30. The MHA had the highest concentration in the age group 41-45 with 24.4 percent. The MSL and MBA/MHA both had the largest age group of 36-40 with 25.5 percent and 26.1 percent, respectively. Finally, the MBA/MSL age group most represented was 31-35 (17.5 percent).

Table 1

Demographic Characteristics (gender, age, marital status, race, ethnicity, income level, number of children, and program of study) of the sample

Demographic And Program Variables	Frequency	Valid%
Gender	n=407	
Male	118	29.0%
Female	289	71.0%
Age	n=407	
22-25	35	8.6%
26-30	67	16.5%
31-35	75	18.4%
36-40	83	20.5%
41-45	71	17.4%
46-50	44	10.8%
51-55	28	6.9%
56-60	3	.7%
61-65	1	.2%
Marital Status	n=407	
Single	137	33.7%
Married	213	52.2%
Divorced	54	13.3%
Widowed	3	.7%
Race	n=407	
White	205	50.4%
Black	185	45.5%
Asian	17	4.2%
American Indian or Alaska Native	0	0.0%
Native Hawaiian or other Pacific Islander	0	0.0%
Ethnicity		
Hispanic	n=407	
Non-Hispanic	8	2.0%
	399	98.0%
Income	n=407	
$20,000 or less	28	6.9%
$20,001 - $40,000	66	16.2%
$40,001 - $60,000	119	29.2%
$60,001 - $80,000	81	19.9%
$80,001 - $100,000	61	15.0%
>$100,001	52	12.8%

Table 1 (cont'd)

Demographic Characteristics (gender, age, marital status, race, ethnicity, income level, number of children, and program of study) of the sample

Demographic And Program Variables	Frequency	Valid%
# of Children in the Household	n=407	
0	191	46.9%
1	84	20.6%
2	85	20.9%
3	35	8.6%
4	10	2.5%
5+	2	.5%
Program of Study	n=407	
MBA	143	35.1%
MHA	123	30.2%
MSL	31	7.6%
MBA/MHA	80	19.7%
MBA/MSL	30	7.4%

Note. Income is individual income, not household income.

Table 2

Demographic Characteristics (age, marital status, race, ethnicity, income level, number of children, and program of study): Total Sample and by Gender

Demographic Variables	Male Frequency	Male Percent	Female Frequency	Female Percent	Total Sample Frequency	Total Sample Valid Percent
Age	n=118		n=289		n=407	
22-25	12	10.2%	23	8.0%	35	8.6%
26-30	19	16.1%	48	16.6%	67	16.5%
31-35	27	22.9%	48	16.6%	75	18.4%
36-40	23	19.5%	60	20.8%	83	20.4%
41-45	18	15.3%	53	18.3%	71	17.4%
46-50	8	6.8%	36	12.5%	44	10.9%
51-55	10	8.4%	18	6.2%	28	6.9%
56-60	1	.8%	2	.7%	3	.7%
61-65	0	.0%	1	.3%	1	.2%

Table 2

Demographic Characteristics (age, marital status, race, ethnicity, income level, number of children, and program of study): Total Sample and by Gender

Demographic Variables	Male Frequency	Male Percent	Female FrequencY	Female Percent	Total Sample Frequency	Total Sample Valid %
Marital Status	n=118		n=289		n=407	
Single	37	31.4%	100	34.6%	137	33.7%
Married	75	63.5%	138	47.8%	213	52.3%
Divorced	6	5.1%	48	16.6%	54	13.3%
Widowed	0	.0%	3	1.0%	3	.7%
Race	n=118		n=289		n=407	
White	66	55.9%	139	48.1%	205	50.4%
Black or African American	44	37.3%	141	48.8%	185	45.5%
Asian	8	6.8%	9	3.1%	17	4.1%
American Indian or Alaska Native	0	.0%	0	.0%	0	.0%
Native Hawaiian or Other Pacific Islander	0	.0%	0	.0%	0	.0%
Ethnicity	n=118		n=289			n=407
Hispanic or Latino	1	.9%	7	2.4%	8	2.0%
Non-Hispanic or Latino	117	99.1%	282	97.6%	399	98.0%
Income	n=118		n=289		n=407	
$20,000 or less	10	8.5%	18	6.2%	28	6.9%
$20,001 - $40,000	19	16.1%	47	16.3%	66	16.2%
$40,001 - $60,000	23	19.5%	96	33.2%	119	29.2%
$60,001 - $80,000	25	21.2%	56	19.4%	81	19.9%
$80,001 -$100,000	17	14.4%	44	15.2%	61	15.0%
$100,001 +	24	20.3%	28	9.7%	52	12.8%
# of Children in Household	n=118		n=289		n=407	
0	52	44.2%	139	48.2%	191	46.9%
1	21	17.8%	63	21.8%	84	20.6%
2	30	25.4%	55	19.0%	85	20.9%
3	9	7.6%	26	9.0%	35	8.6%
4	5	4.2%	5	1.7%	10	2.5%
5+	1	.8%	1	.3%	2	.5%

Table 2 (cont'd)

Demographic Characteristics (age, marital status, race, ethnicity, income level, number of children, and program of study): Total Sample and by Gender

Demographic Variables	Male Frequency	Male Percent	Female FrequencY	Female Percent	Total Sample Frequency	Total Sample Valid %
Program of Study	n=118		n=289		n=407	
MBA	59	50.0%	84	29.1%	143	35.1%
MHA	16	13.6%	107	37.0%	123	30.2%
MSL	15	12.7%	16	5.5%	31	7.6%
MBA/MHA	20	16.9%	60	20.8%	80	19.7%
MBA/MSL	8	6.8%	22	7.6%	30	7.4%

Marital status was also compared by program. For MBA, 50.3 percent of the students were single compared with 19.5 percent of the MHA, 38.7 percent of the MSL, and 26.3 percent and 26.7 percent for the MBA/MHA and MBA/MSL, respectively. Similarly, the MHA and MBA/MHA had the highest representation of married students with 63.4 percent and 64.9 percent, respectively. There were 25.8 percent divorced students in the MSL program. Race was evenly distributed across the programs.

The MBA consisted of 48.3 percent white and 46.8 percent black or African American. The MHA was 48.7 percent white and 48.0 percent black or African American. The MSL had 45.2 percent white and 48.3 percent black or African American. The MBA/MHA consisted of 61.2 percent white and 35.0 percent black or African American. Finally, the MBA/MSL was 43.3 percent white and 53.4 percent black. There were no representations of American Indian or Alaska Native or Native Hawaiian or other Pacific Islander. Ethnicity revealed only 3.3 percent of the sample were Hispanic or Latino (8 respondents), and these eight were represented in every program except for the MSL. There were few Asian students, 17, and these were most represented in the MBA and MHA programs.

Income was next compared against the five programs. For the MBA, the largest income group was $40,001 to $60,000 with 34.2 percent of the sample. The MHA group had 26.0 percent of the respondents with incomes of $40,001 to $60,000 and 26.9 percent of incomes of $60,001 to $80,000. The MSL group reported the largest income groups of $20,001 to $40,000 (22.6 percent), and $40,001 to $60,000 (22.6 percent). The dual degrees MBA/MHA and MBA/MSL had the largest income group of $40,001 to $60,000, 26.2 percent, and 33.3 percent respectively.

Finally, the number of children living in the respondents' households was compared by program. The MBA had a large majority of zero children (60.8 percent). The sample showed MBA students reported 15.4 percent with one child and 16.8 percent with two children. The MHA program also had the largest group (39.8 percent) with zero children. There were also 22.0 percent with one child, 21.1 percent with two children, and 13.0 percent with three children in the MHA program. The MSL had a majority of 58.1 percent with no children and 22.6 percent with one child. The MBA/MHA had 31.3 percent with zero children, 27.4 percent with one child, and 28.7 percent with two children. Finally, the MBA/MSL had 39.9 percent with zero children, 20.0 percent with one child, and 26.7 percent with two children. The data from this study indicate that demographic factors of gender, age, and marital status are fairly consistent with the findings of Aslanian (2001) and Aslanian, and Brickell (1980).

Similarly, with the categorical independent variables, multiple runs with MLR were necessary to examine all possible combinations. Age and income were entered into the equation as continuous variables for ease of analysis and interpretation. Both were entered as midpoints of the ranges and dummy variables were not needed for the analysis. The categorical dependent variables "Number of children" and "Marital Status" were entered as dummy variables before being entered into the model. With multiple combinations possible, multiple iterations were run to evaluate each possible outcome. In addition, some of the categories for "Number of children" and "Marital Status" has fewer than 50 cases, and were combined. "Number of children" was combined into four categories: zero, one, two, and three or more. "Marital Status" was combined into three categories: single, married, and divorced or widowed.

For "Number of children," zero was the first base category examining the relationship between zero vs. one, zero vs. two, and zero vs. three or more. The next MLR run selected one as the base category giving the comparison of the group one vs. two, and one vs. three or more. The final run selected two as the base yielding the final possible combination of two vs. three or more.

Ethnicity was removed as a variable as it contained only eight non-Hispanic respondents. In addition, race was combined into two categories: white and non-white also due to the very low or no representation of Asian, American Indian, and Native Hawaiian in the sample.

The MLR analysis results indicated that the model fit the data well (p ≤ .000), with the demographic variables explaining between 24.2 percent (Cox & Snell) and 26.0 percent (Nagelkerke) of why individuals chose different programs of study.

The independent variable "gender" was significant in some MLR rotations. The odds of a male choosing MHA over MBA were 85 percent lower than a

Table 3

Demographic Characteristics (age, marital status, race, ethnicity, income level, number of children, and program of study): Total Sample by Program

Demographic Variables	MBA n=143	Percent of Program	MHA n=123	Percent of Program	MSL n=31	Percent of Program	MBA/MHA n=80	Percent of Program	MBA/MSL n=30	Percent of Program
Age										
22-25	24	16.8%	2	1.6%	3	9.7%	5	6.3%	1	3.3%
26-30	32	22.3%	19	15.4%	4	12.9%	9	11.3%	3	10.0%
31-35	28	19.6%	16	13.0%	6	19.4%	14	17.5%	11	36.7%
36-40	25	17.5%	20	16.3%	8	25.8%	21	26.1%	9	30.0%
41-45	19	13.3%	30	24.4%	5	16.1%	14	17.5%	3	10.0%
46-50	10	7.0%	17	13.8%	5	16.1%	10	12.5%	2	6.7%
51-55	5	3.5%	16	13.0%	0	.0%	6	7.5%	1	3.3%
56-60	0	.0%	2	1.6%	0	.0%	1	1.3%	0	.0%
61-65	0	.0%	1	.8%	0	.0%	0	.0%	0	.0%
Marital Status	n=143		n=123		n=31		n=80		n=30	
Single	72	50.3%	24	19.5%	12	38.7%	21	26.3%	8	26.7%
Married	55	38.5%	78	63.4%	11	35.5%	52	64.9%	17	56.6%
Divorced	14	9.8%	21	17.1%	8	25.8%	6	7.5%	5	16.7%
Widowed	2	1.4%	0	.0%	0	.0%	1	1.3%	0	.0%

Table 3

Demographic Characteristics (age, marital status, race, ethnicity, income level, number of children, and program of study): Total Sample by Program

Race	n=143		n=123		n=31		n=80		n=30	
White	69	48.3%	60	48.7%	14	45.2%	49	61.2%	13	43.3%
Black or African American	67	46.8%	59	48.0%	15	48.3%	28	35.0%	16	53.4%
Asian	7	4.9%	4	3.3%	2	6.5%	3	3.8%	1	3.3%
American Indian or Alaska Native	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Native Hawaiian or Other Pacific Islander	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
Ethnicity										
Hispanic or Latino	5	3.5%	1	.8%	0	.0%	1	1.2%	1	3.3%
Non-Hispanic or Latino	138	96.5%	122	99.2%	31	100%	79	98.8%	29	96.7%
Income	n=143		n=123		n=31		n=80		n=30	
<$20,000	22	15.4%	2	1.6%	2	6.5%	1	1.3%	1	3.4%
$20,001 - $40,000	23	16.1%	18	14.6%	7	22.6%	14	17.5%	4	13.3%
$40,001 - $60,000	49	34.2%	32	26.0%	7	22.6%	21	26.2%	10	33.3%
$60,001 - $80,000	24	16.8%	33	26.9%	6	19.3%	12	15.0%	6	20.0%
$80,001 - $100,000	16	11.2%	21	17.1%	4	12.9%	17	21.2%	3	10.0%
>$100,001	9	6.3%	17	13.8%	5	16.1%	15	18.8%	6	20.0%

Table 3

Demographic Characteristics (age, marital status, race, ethnicity, income level, number of children, and program of study): Total Sample by Program

Number of Children in Household										
0	87	60.8%	49	39.8%	18	58.1%	25	31.3%	12	39.9%
1	22	15.4%	27	22.0%	7	22.6%	22	27.4%	6	20.0%
2	24	16.8%	26	21.1%	4	12.9%	23	28.7%	8	26.7%
3	8	5.6%	16	13.0%	1	3.2%	8	10.0%	2	6.7%
4	2	1.4%	4	3.3%	1	3.2%	1	1.3%	2	6.7%
5+	0	.0%	1	.8%	0	.0%	1	1.3%	0	.0%

female choosing MHA over MBA. Similarly, the odds of a male choosing MBA/MHA over the MBA were 69 percent lower than a female choosing MBA/MHA over MBA. Finally, the odds of a male choosing MSL over MHA were 5.61 times higher than a female choosing MSL over MHA. This was expected with the large number of females compared to males within the MHA program.

The independent variable of age was also a strong predictor. For every increase in age, or the older a student, the odds are 1.06 times higher of choosing MHA over MBA. For every increase in age, students have six percent lower odds of choosing MSL over MHA.

The independent variable marital status was a strong predictor in some comparisons. The odds of married students choosing MSL over MHA were 65 percent lower than the odds for divorced students. In addition, the odds of married students choosing MBA/MHA over MSL were 4.22 time higher than the odds for divorced students.

Regarding the independent variable race, the odds for whites were 1.88 times higher of selecting MBA/MHA over MBA than the odds for non-whites. The odds of whites choosing MBA/MHA over MSL were 2.33 times higher that the odds for non-whites.

Finally, the independent variable "Number of Children Living in Household" yielded some significant findings. The odds of students with one or two children selecting MBA/MHA over MBA were 3.11 and 2.82 times higher, respectively, than the odds for students with zero children. The odds of students with two children selecting the MBA/MHA over the MHA were 2.43 times higher than the odds for students with zero children. Conversely, the odds of students with two children choosing the MBA/MHA over the MHA were 56 percent lower than the odds of students with zero children. Finally, the odds of students with one and two children vs. students with zero children were 2.79 and 2.82 times higher (respectively) of choosing the MBA/MHA over the MBA/MSL. Tables 4 through 6 show the detailed results of the MLR analyses.

Discussion

The study is primarily interested in knowing if there are differences between the demographic profile and the program of study of adults enrolling in an evening graduate degree program. It found moderate differences in demographics across the five programs. The largest program represented was the MBA with 143 student respondents followed closely by the MHA with 123 student respondents.

The demographic profile from this study suggests that students interested in the MBA program enter a part-time MBA program at an earlier age, and earlier in their career when compared to the other programs. This information

Table 4

Multinomial Logistic Regression, Odds Ratio, and Likelihood Ratio Tests for Demographics Impact on Program Choice with MBA as Base

Variable	B	SE	Wald	p	Odds Ratio
MHA Intercept	-2.95	.95	9.68	.002	
Male vs. Female	-1.91	.36	28.80	< .000	.15
Age	.06	.02	8.62	.003	1.06
Single vs. Divorced	-.17	.50	.11	.737	.85
Married vs. Divorced	.58	.42	1.97	.161	1.79
Single vs. Married	-.69	.41	2.82	.093	.50
White vs. non-white	.05	.29	.03	.871	1.05
Income	.01	.01	3.01	.083	1.01
1 Child vs. 0	.31	.39	.64	.422	1.37
2 Children vs. 0	.15	.41	.14	.714	1.16
3 Children vs. 0	.68	.49	1.97	.160	1.98
2 Children vs. 1	-.31	.39	.09	.429	.74
3 Children vs. 1	.41	.52	.64	.424	1.51
3 Children vs. 2	.55	.51	1.15	.284	1.73
MBA/MSL and MSL Intercept	-.87	1.08	.65	.419	
Male vs. Female	-.184	.34	.30	.585	.83
Age	-.00	.02	.00	.954	1.06
Single vs. Divorced	-.74	.50	1.74	.188	.48
Married vs. Divorced	-.48	.47	1.03	.311	.62
Single vs. Married	-.22	.47	.21	.645	.80
White vs. non-white	-.17	.32	.28	.594	.84
Income	.01	.01	2.88	.089	1.01
1 Child vs. 0	.11	.44	.06	.810	1.12
2 Children vs. 0	.00	.47	.00	.996	1.00
3 Children vs. 0	.19	.61	.09	.761	1.20
2 Children vs. 1	-.09	.51	.03	.856	.91
3 Children vs. 1	.11	.65	.03	.869	1.11
3 Children vs. 2	.20	.64	.01	.754	1.22

Note: MBA is base; MBA/MSL and MSL intercept.

Table 5

Multinomial Logistic Regression, Odds Ratio, and Likelihood Ratio Tests for Demographics Impact on Program Choice with MHA as Base

Variable	B	SE	Wald	p	Odds Ratio
MBA/MSL and MSL Intercept	.208	1.14	3.36	.067	
Male vs. Female	1.73	.41	17.99	< .000	5.61
Age	-.06	.02	5.60	.014	.94
Single vs. Divorced	-.57	.58	.95	.329	.57
Married vs. Divorced	-1.06	.46	5.31	.021	.35
Single vs. Married	.47	.50	.86	.354	1.60
White vs. non-white	-.22	.34	.41	.523	.80
Income	.00	.01	.03	.861	1.00
1 Child vs. 0	-.20	.46	.20	.658	.82
2 Children vs. 0	-.15	.48	.09	.763	.86
3 Children vs. 0	-.50	.58	.74	.388	.61
2 Children vs. 1	.04	.51	.01	.939	1.04
3 Children vs. 1	-.31	.61	.26	.612	.74
3 Children vs. 2	-.35	.60	.33	.565	.71
MBA/MHA Intercept	-1.06	1.10	.92	.338	
Male vs. Female	.74	.39	3.59	.058	2.09
Age	-.02	.02	1.12	.289	.98
Single vs. Divorced	1.05	.62	2.90	.088	2.86
Married vs. Divorced	.38	.50	.59	.444	1.46
Single vs. Married	.64	.47	1.87	.171	1.90
White vs. non-white	.58	.31	3.47	.063	1.79
Income	.00	.01	.06	.802	1.00
1 Child vs. 0	.82	.42	3.77	.052	2.28
2 Children vs. 0	.89	.44	4.07	.044	2.43
3 Children vs. 0	.25	.50	.24	.623	1.28
2 Children vs. 1	.05	.42	.91	.908	1.05
3 Children vs. 1	-.60	.50	1.45	.229	.55
3 Children vs. 2	-.65	.49	1.73	.188	.52

Note: MHA is base; MBA/MSL and MSL intercept.

Table 6

Multinomial Logistic Regression, Odds Ratio, and Likelihood Ratio Tests for Demographics Impact on Program Choice with MSL as Base

Variable	B	SE	Wald	p	Odds Ratio
MBA/MHA Intercept	-3.13	1.28	6.03	.014	
Male vs. Female	-.99	.40	6.05	.014	.37
Age	.04	.03	1.96	.162	1.04
Single vs. Divorced	1.69	.69	5.56	.018	5.05
Married vs. Divorced	1.44	.56	6.54	.011	4.22
Single vs. Married	.17	.55	.10	.753	1.19
White vs. non-white	.80	.37	4.71	.030	2.23
Income	.00	.01	.00	.964	1.00
1 Child vs. 0	1.03	.50	4.14	.042	2.79
2 Children vs. 0	1.04	.53	3.83	.050	2.82
3 Children vs. 0	.745	.65	1.32	.252	2.11
2 Children vs. 1	.01	.52	.00	.986	1.01
3 Children vs. 1	-.29	.65	.20	.658	.75
3 Children vs. 2	-.30	.65	.21	.644	.74

Note: MBA/MSL and MSL is base; MBA/MHA intercept.

is valuable to MBA administrators and instructors in designing curricula that may be more interesting and attractive to potential and current students in this age bracket. Additional research is needed to determine if these results are consistent at other institutions.

These findings also provided an important profile of graduate students from this population in regard to demographics. This information is critical for university administrators to understand the constantly changing demographics of not only the current students, but also potential students. This information may enable targeted marketing efforts to reach prospects that are most likely to enroll in a part-time graduate program.

In the survey of adult graduate students by Aslanian (2001), the typical profile of adult graduate students indicated the majority were 40 years of age, female, married, and white, with income of $56,000. This was similar to the overall findings of this study which indicated the majority of students were between the ages of 36 and 40, female, white, with income between $40,001 and $60,000. This suggests that the profile of graduate students may have

remained consistent over the past nine years and may also be applicable to other graduate degree programs that were not analyzed in this research study.

However, results of this study indicate that differences do exist across the program of study with regard to demographics. Different aspects of the programs of study appear to appeal to specific demographic groups. This knowledge will enable administrators to modify courses or curricula for these specific areas of study. It also shows programs where there is opportunity lost (i.e., the types of students that other programs of study are attracting).

Our multinomial logistic regression was used to test for a potential relationship of demographic variables on the log-odds ratio being enrolled in one graduate program over another. The results (e.g. Tables 5-7) of the analyses provided support for this.

The variables with significant predictive value were gender, age, race, number of children, and marital status. Males were much less likely to choose the MHA and MBA/MHA over the MBA. The data supported this assumption with a large percentage of women as compared to men enrolled in the MHA and MBA/MHA program. Although we do not test why individuals choose a given program or whether the holder of a MBA or MHA degree is more successful, it is clear that within this study's findings that females value the MHA and MBA/MHA degree more than males do in the sense that they are more likely to choose a MHA degree. This finding is much more evident than those surveyed by AUPHA.

Age was also a good predictor indicating that for every increase in the age categories, the respondents had odds 1.06 times higher of choosing the MHA over the MBA. Married vs. divorced students had odds 65 percent lower of choosing MSL over MHA and had odds 5.05 times higher of choosing MBA/MHA over the MSL.

White students vs. non-white students had odds 1.88 times higher of selecting MBA/MHA over MBA and had odds 2.33 times higher of choosing MBA/MHA over the MSL. Students with one or two children vs. zero children had odds 3.11 times and 2.82 times higher of selecting the MBA/MHA over the MBA. Student with two children vs. zero had odds 2.43 times higher of choosing the MBA/MHA over the MHA. Conversely, students with two children vs. one child had odds 56 percent lower of choosing MBA/MHA over MHA. And, students with one and two children vs. zero had odds 2.79 and 2.82 times higher of choosing the MBA/MHA over the MSL.

These data suggest that females compared to males are much more likely than males to choose the MHA or MBA/MHA program. Though more pronounced, this study's findings are consistent with the AACSB and AUPHA studies' findings. In addition, students with one or two children as compared

to zero seem more likely to choose the MBA/MHA degree over the MHA and the MBA degree. This may suggest that older students with established families may decide to return for the dual degree as compared to students with no children. This is in conflict, however, with the demographic data that suggests the most frequently reported number of children in all programs was zero children. Further research is needed to determine if similar findings are similar from other graduate school samples.

These findings indicate some significant concentrations of specific demographic groups in particular programs. For example, although females numerically are much more represented in the MBA and MBA/MHA programs, males are more likely to choose the MBA. This would suggest a significant opportunity for growth in this program by targeting and recruiting potential students with different demographic profiles. Administrators in colleges and universities can use this data to evaluate and compare enrollment profiles across various programs to develop specific growth strategies in disciplines underrepresented by certain groups.

PRACTICAL IMPLICATIONS

There are several practical implications that can be obtained from this research study. While the MLR analyses provided new and solid insight with the parametric data, the descriptive statistics are equally powerful in the application to real world conditions and strategies.

College and university professors and administrators can use this study as a benchmark to compare other student populations, and to test for patterns or consistencies across programs. For example, several researchers (Grady, 2001; Lichtenstein, 2005; Myers, 2008) have noted that universities are strengthening their efforts with respect to diversity recruitment in MHA programs. With this information, institutions of higher learning may then be able to focus marketing efforts on specific portions of the population to reach those most likely to enroll in a graduate degree program. For example, the data from this study show a high concentration of single males with no children between the ages of 26 and 30. With this data, specific publications or events may be targeted to improve the recruiting efforts for new MBA students.

In addition, college and university administrators can use the multinomial logistic regression models to analyze prospect lists to determine which program that prospective students may be most likely to select, and from that data, make appropriate calls or suggestions to future students. These practical implications can result in improved recruiting efficiency and effectiveness and also in maintaining an invigorating and stimulating master's degree program for current and future students.

To summarize, our analyses found five important points:
- Males are more likely to attend an MBA or MBA/MHA program than females or an MHA program.
- Racial diversity is more prevalent in our sample than earlier research.
- Income appears to be consistent across all five graduate programs.
- From the descriptive statistics data, it suggests that a majority of students attend graduate school at a time when no children are living in the household. This could include young adults enrolling prior to starting a family, or with older students returning after their children have left the home.
- Students pursuing the MHA degree had a demographic profile indicating that they enrolled in their graduate program when, on average, they were older as compared to students in the other graduate programs at the university. In addition, the MHA students reported average incomes higher than the students in other graduate programs. This may suggest that in the MHA and healthcare discipline, students are entering this program at a later stage in their careers when compared to other graduate programs. Further research is suggested to test this finding.

LIMITATIONS

This study is limited to one university in two geographic locations which may limit the ability to generalize the findings to the larger population of adult graduate students. This limitation is consistent with previous research on this subject. It was conducted in unprecedented periods of economic stress and uncertainty which may have resulted in population segments that were skewed. The study does not account for current occupation (e.g. nursing, engineering). Due to a small numbers of cases in some variables, several categories were combined which may have resulted in missing subtleties in certain programs or groups. Though the response rate was acceptable, the study utilized convenience sampling which may have resulted in the exclusion of certain groups or respondents. In addition, the study's finding with respect to having a greater percentage of African-Americans than the general population or schools associated with the AACSB or AUPHA's studies may be an indication of a skewed sample. This also could be indicative of a trend for this population in that they participate in non-traditional programs to a greater degree—more research is needed in this area.

RECOMMENDATIONS FOR FUTURE STUDY

Future research is recommended to duplicate this study to test for similarity of results. This should occur at the same school at a different time (i.e., with a different cohort of students) and also at other schools, public and private, in a variety of geographic location to test for similarity of results. Also, future research should include an examination on whether or not students with different demographic profiles are as successful in the various graduate degree programs when compared to students with the predominant profile.

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