

DISSERTATION

INFORMING GRADUATE ENROLLMENT MANAGEMENT:
MARKETING AND ADMISSIONS THROUGH STUDENTS' PERSPECTIVES

Submitted by

Sandra J. Stack

School of Education

In partial fulfillment of the requirements

For the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

Summer 2009

Copyright by Sandra J. Stack

©All Rights Reserved

COLORADO STATE UNIVERSITY

June 5, 2009

WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED
UNDER OUR SUPERVISION BY SANDRA J. STACK ENTITLED INFORMING
GRADUATE ENROLLMENT MANAGEMENT: MARKETING AND ADMISSIONS
THROUGH STUDENTS' PERSPECTIVES BE ACCEPTED AS FULFILLING IN
PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

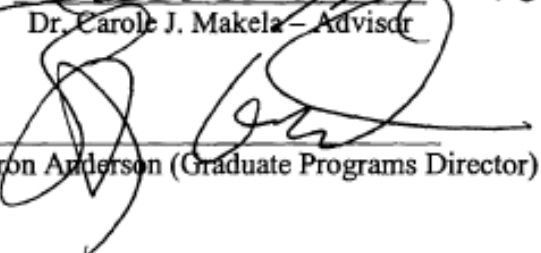
Committee on Graduate Work


Dr. Jean Lehmann


Dr. Cathy Kennedy


Dr. Jim Folkestad


Dr. Carol J. Makela - Advisor


Dr. Sharon Anderson (Graduate Programs Director)

ABSTRACT OF DISSERTATION

INFORMING GRADUATE ENROLLMENT MANAGEMENT: MARKETING AND ADMISSIONS THROUGH STUDENTS' PERSPECTIVES

This study identifies college choice factors influencing working graduate students to enroll in an MBA program at a private university. The Education Marketing P Prism (EMPP), a survey instrument, was developed and electronically administered to 934 enrolled students at a private higher education institution in the United States. The response rate was 341 or 37%.

Colleges and universities use marketing and admissions intelligence to inform their enrollment management strategies and offset declining student enrollments, budget deficits, and increasing competition. Enrollment management research has focused on undergraduate students and factors that influence their college choices. Graduate students today are multigenerational creating a greater need for graduate enrollment management research.

Quantitative research methodology was used to identify the factors that influence the enrollment decisions of current enrolled business graduate students. Key elements of enrollment management organization and strategy and integrated marketing concepts such as the four Ps (product, price, place, promotion) informed this study. Specific research questions examined the factors that influenced the enrollment decision of business graduate students. Factors were mapped to a modified marketing P framework and to Individual Student Factors (ISFs) or University Organizational Factors (UOFs).

Results of factor analysis showed a reorganization of items within a new marketing P framework and a reduction of survey items from 62 to 31. Using the new P marketing framework, findings showed ability to balance work and school (Mean = 1.72) most strongly influenced students' decisions to enroll at the study university. Analysis of variance, ANOVA, was conducted for each marketing Ps (people, personal, place, price, product, promotion). Results show there was a difference for parents' bachelor's education and the marketing P subgroup product program attributes ($p = .001$). There were no differences between the Boomer and Generation X age groups on the influence of enrollment factors.

Ultimately, many different factors may influence the personal decision to attend an MBA program and personal factors are complex for graduate education. For the findings from the EMPP instrument to be useful, universities must determine which elements of the marketing P mix are most important to their target audience to inform marketing and admissions enrollment management strategies. The findings from this study suggest that influential enrollment factors for working graduate students are different from those identified in the literature for undergraduate students.

Sandra J. Stack
School of Education
Colorado State University
Fort Collins, CO 80523
Summer 2009

Acknowledgements

The completion of this dissertation was the culmination of years of study. Being a distance student balancing family and career frequently made this a solitary journey. I wish to thank a few key individuals who helped me realize this achievement.

My family. My husband Greg who has always believed in my abilities, who listened patiently, who picked up the slack when necessary, and who continuously and steadfastly redirected my motivation back on course when it was waning at various times throughout the years. My 12 year old son Steven and 8 year old daughter Sage have only known a mom in school always having homework. I thank them for entertaining themselves and understanding when our schedules revolved around mom's homework commitments. I thank my sister and friend Lynn, whose sincere heartfelt interests, insights, and discussion improved the organization of my dissertation.

My advisor, Dr. Carole Makela, rescued me from the perils of ABD by agreeing to be my advisor. I would not be here without her guidance and support.

My other committee members, Dr. Jean Leahman, Dr. Cathy Kennedy, and Dr. Jim Folkestad, for being willing to work with a distance student they didn't know very well.

My former colleagues, Dr. Jim Otten and Dr. Patricia Breen, who provided support, encouragement, and advice to finish.

My mother, Jennie, for years and years ago, embedding into my psyche, that I can accomplish anything. I credit her for my internal perseverance on never giving up on something that you truly want.

TABLE OF CONTENTS

	Page
SIGNATURE PAGE	ii
ABSTRACT OF DISSERTATION	iii
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	xi
CHAPTER 1: INTRODUCTION	1
Background	3
Statement of the Problem	7
Purpose of Research	7
Research Questions	8
Definitions	8
Researcher's Reflection	10
Overview of Study	12
Theoretical Framework	13
CHAPTER 2: REVIEW OF THE LITERATURE	14
Enrollment Management	14
College Choice	17
Undergraduate College Choice Models	19
<i>Econometric Choice Models</i>	20
<i>Sociological/Attainment Choice Models</i>	20
<i>Information Processing Choice Models</i>	21
<i>Combined Choice Models</i>	22

	Page
Graduate Student Choice Studies.....	26
Marketing and Admissions	31
Generational Data	36
CHAPTER 3: METHODOLOGY	41
Research Design.....	41
Data Collection Instrument	42
<i>Instrument Development</i>	43
<i>Individual Student Factors</i>	45
<i>University Organizational Factors</i>	46
<i>Demographics</i>	47
Sample	47
<i>Pilot Testing</i>	48
<i>Survey Administration</i>	50
Data Analysis Plan.....	50
CHAPTER 4: FINDINGS	53
Graduate Students	53
Understanding Enrollment	55
Factors Influencing Enrollment (RQ#1)	55
<i>Interaction</i>	56
<i>Reasons</i>	57
<i>Concerns</i>	57
<i>Academic Ability</i>	57

	Page
<i>Factor Analysis</i>	60
<i>People</i>	62
<i>Personal</i>	63
<i>Place</i>	65
<i>Price</i>	66
<i>Product</i>	67
<i>Promotion</i>	68
Essential Website Items (RQ #2)	70
Additional Universities Inquired, Applied or Enrolled (RQ #3)	72
Parent Education (RQ#4)	75
<i>Analysis of Variance</i>	75
Generational Level (RQ#5).....	79
<i>t-Tests</i>	79
Marketing P Comparison (RQ# 6)	81
CHAPTER 5: CONCLUSION	83
Overview of Problem.....	83
Review of Methodology	84
Summary of Major Findings.....	84
Findings and Discussions.....	85
<i>Factors Influencing Enrollment (RQ#1)</i>	85
<i>Essential Website Items (RQ #2)</i>	89
<i>Additional Universities Inquired, Applied or Enrolled (RQ #3)</i>	90

	Page
<i>Parent Education (RQ#4)</i>	92
<i>Generational Level (RQ#5)</i>	93
<i>Marketing P Comparison (RQ# 6)</i>	94
Limitations	96
Conclusions	96
Implications For Action	97
Recommendations For Research.....	98
REFERENCES	100
APPENDIXES	105
Appendix A: EMPP Survey Instrument (Researcher version)	106
Appendix B: Human Subjects Approval Letter	112
Appendix C: Letter to Participants	113
Appendix D: Other Influential Factors from Open-Ended Question Ordered By Number of Responses.....	114
Appendix E: Analysis of Variance of all Marketing Ps by Parents’ Master’s Education	115
Appendix F: t Tests of Marketing Ps by Generation	116
Appendix G: EMPP Survey Instrument (Student version).....	117

LIST OF TABLES

	Page
Table 1 Generation Type Comparison	38
Table 2 Summary of Original Constructs	45
Table 3 Research Questions and Planned Analysis	52
Table 4 Profile of Graduate Student Respondents	55
Table 5 Student Respondents With Annual Cap Tuition Reimbursement	56
Table 6 Items Rank Ordered By Strongly Influenced Enrollment Decision	59
Table 7 Other Influences Identified From Open Ended Question Ordered By Number of Responses	60
Table 8 Quality Items Rank Ordered From Strongly Influenced Enrollment Decision	61
Table 9 People Factor Analysis Results.....	64
Table 10 Personal Factor Analysis Results.....	66
Table 11 Place Factor Analysis Results.....	67
Table 12 Price Factor Analysis Results	68
Table 13 Product Factor Analysis Results	69
Table 14 Promotion Factor Analysis Results.....	70
Table 15 Essential Web Items Rank Ordered By Frequency of Yes Essential	72
Table 16 Other Web Site Items Rank Ordered By Number of Responses ...	73
Table 17 Months Spent Searching Before Applying	74
Table 18 Other Universities Applied To/Inquired At	75
Table 19 Respondents' Parent Education	76

	Page
Table 20	Analysis of Variance of All Marketing Ps by Parents’ Bachelor’s Education78
Table 21	Program Attributes Post Hoc Results80
Table 22	Generation Student Identified81
Table 23	Newly Formed P Factors Rank Ordered by Strongly Influenced Enrollment Decisions.....82

CHAPTER 1: INTRODUCTION

Colleges and universities face perpetual challenges to meet their new student enrollment and retention goals. Higher education institutions have tremendous pressure to find new ways or the most effective ways to both attract and retain students. The number one trend predicted to have the most significant impact on enrollment and retention in higher education by 2015 is the “Changing life cycles as our nation’s population ages” (Yankelovich, 2005, p.6). This has a huge impact on higher education because the new emerging pattern is to spread out post secondary higher education over a 12-year period and more closely integrate education with work (2005).

Graduate students today are multigenerational--Boomer, Gen X or Millennial--they may be single, married or divorced; they may be pregnant, a parent, a grandparent or adopting. They may be full-time employees or recently downsized or right sized. Some graduate students may have been out of school for years or may have recently completed their bachelor’s degrees. The fastest growing population in higher education is the working adult student (Compton, Cox, & Laanan, 2006) and that same population is transitioning into graduate school. “Today’s graduate programs are much more likely to enroll adult students who are employed fulltime, who commute to and from campus, and who enroll on a part-time basis” (Polson, 2003, p. 59).

Many colleges and universities addressed the need to maximize their potential to recruit, enroll, and retain the optimal number of students by implementing enrollment management, a systematic way to improve recruitment, admission, retention, and graduation of students (Hossler, 2004; Huddleston, 2003). DesJardins (2002) states “given the increased reliance of tuition revenue, the pressure to enroll more high ability

students, and the desire to have a diverse student body, effective recruitment and enrollment of students is an even more important function than it was a decade ago” (p. 531). Though that is still true today, much of the available literature on enrollment management has focused on undergraduate students in terms of how they choose a college, what influences their decisions, and what their financial concerns and challenges may be (Hossler & Gallagher, 1987; Hossler, Schmit & Vesper, 1999; Long 2003). Comparatively, less research exists on enrollment management at the graduate level (Browning, 2000; Maleney, 1987, Schulz, 2006) and on the factors that influence their early decisions to inquire, apply and enroll in a graduate program. The majority of the graduate research focuses largely on enrolled full-time traditional graduate students, attrition, and their experiences related to socialization during graduate school and into their profession (Nesheim, Guentzel, Gansemer-Topf, Ross & Turrentine, 2006).

The problem is how does a university inform and modify their marketing and admissions enrollment management strategies and processes to serve the diverse needs of today’s multigenerational graduate students while meeting their fiscal responsibilities and fulfilling their mission? Marketing and enrollment management may have had a significant impact on the college-bound high school student, but how has enrollment management research informed colleges and universities about how the working graduate student goes about choosing a graduate program? If “enrollment management is designed to influence how many and which students enroll” (Hossler, 2004, ¶5), how exactly should a university design enrollment management for their potentially multigenerational graduate students? The changing profile of graduate students makes effective recruitment and retention of multiple generations challenging for institutions.

Higher education will want to be responsive to these changes and become effective at reaching the working student.

The purpose of this research study is to bridge the literature gap in graduate enrollment management by studying the factors that influence students to enroll in a graduate program by gathering data on their initial enrollment experience. How can the systematic design of graduate enrollment management be improved to yield greater numbers of new and continuing students? What should a university do to meet the needs of students during their search and decision to enroll in graduate study? This research study will attempt to explore these questions. Results of this research will inform universities on how to improve their marketing and admissions enrollment management strategies for graduate students and lessen the gap in the graduate enrollment management literature for this population.

Background

Enrollment managers are constantly in search of a new marketing approach or some creative spark that will both provide competitive advantage and reduce costs (Hossler, 1998). The reasons for the constant search for improvement include declining financial resources, demographic shifts, highly competitive environments for the most qualified students, fast paced technology advances, and expanded flexible delivery formats including more part-time, distance learning, and online delivered studies (Goenner & Pauls, 2005; Schulz, 2006; Woodhouse, 2006; Zalanowski, 2007). Functional units within enrollment management are marketing, admissions, pricing, financial aid, student selection, registrar, student services, institutional research, retention, and advising (Lapovsky, 1999). Enrollment management of the future

“...encompasses a cradle to endowment mentality that starts with recruitment before students even know they want to come, flow into retention, and renews itself with satisfied alumni ready to contribute to the institution” (Henderson, 2001, p. 35). If enrollment management starts with recruitment and knowing their students even before they want to attend, universities need to identify and understand the unique factors that influence today’s students to consider their graduate school. Identifying and communicating those factors begins with marketing and admissions, two key university functional units that play a central role in helping a university meet its new student enrollment management goals.

This is especially true of the business graduate student who, for the purposes of this study, is defined as 27 years or older. Support for this definition was established three ways. First, a study by Barker, Felstehausen, Couch and Henry (1997) found that some needs were more important for graduate students 27 years and older versus younger graduate students. Second, in 2003-04, 60% of master’s students enrolled in MBA programs attended part-time; 83% of those students worked full time and had an average age of 32 (Choy & Cataldi, 2006). Third, according to a National Center for Education Statistics (2006) report, the older student population 25+ years grew at a faster rate than the combined ages of 19-24 year olds for the period between 2000 and 2005.

Researcher Gary D. Maleney noted the deficit of graduate student research in his 1987 study “*A Decade of Research on Graduate Students: A Review of the Literature in Academic Journals.*” He states that “Individuals have been conducting research on graduate students since the inception of graduate study in this country in the 1800s, but the volume of research is relatively insignificant compared to research related to

undergraduate students” (p. 5). Even though there have been studies of various aspects of graduate school choice, a gap in the graduate enrollment management research literature exists.

In the research literature, the theory of student choice is focused largely on the undergraduate population (Maleney, 1987; Nesheim, et al., 2006). Reasons for enrolling in an undergraduate program may be different from reasons students enroll in graduate programs. A recent national survey had college freshmen rank their reasons for choosing a college and the top five were: academic reputation, good jobs for graduates, campus visit, size, and financial aid offered (Hilston, 2006). Undergraduate students are also more likely to be influenced by their parents (Kinzie, Palmer, Hayek, Hossler, Jacob & Cummings, 2004) whereas it may be a more independent decision with different reasons for graduate students. Graduate students reasons for choosing a college may be to further their careers, achieve a personal goal (Cardon & Rogers, 2002), or simply fulfill a desire to learn (Maleney, 1987). The undergraduate student seeks an overall experience that has an educational component. The graduate student seeks the education component to integrate into their overall experience.

Marketing has become commonplace in higher education to attract students and is a key component in the enrollment management process. Kirp (2003) points out that the marketing of higher education and specifically, consistent enrollment management, was partly responsible for a 31% increase of college-bound high school graduates in 1999 with a 300,000 decrease in high school students as compared to a generation earlier. Richard Ruch states, “Today, virtually every college and university is deeply engaged in marketing, including, but not limited to, advertising, from direct mail and billboards to

cable television and the internet” (1999, p. 69). Changing technology and the digital revolution have brought the Information Age where more business is conducted on the internet (Kotler & Keller, 2006). This is true for higher education as well.

A second key component in the enrollment management process is admissions. After marketing, talking with admissions is typically the next step for potential students to sustain interest. Roles and responsibilities vary among graduate admissions departments depending on the enrollment management strategy. At one extreme, in a loosely structured admissions department, admissions representatives may simply respond to questions directed by prospective students. At the other extreme, admissions representatives may employ a strategy such as a consultative selling recruitment approach where the admissions representative seeks prospects interested in the program and asks many questions designed to build rapport and elicit key information aimed at facilitating a buying decision. With either approach, prospective students no longer need to contact the university directly for any information because of the use of technology and the ability to research degrees online.

Technology has not only changed how marketing and admissions attract, interact, and recruit new students creating more challenges in an already highly competitive environment, but has also had an impact on each generation with Millennials being the most technological savvy (Lancaster & Stillman, 2002). Prospective students can now get answers to their questions about graduate study in a matter of seconds. Technology, specifically the internet, has altered how prospective students seek information in their decision-making process. Prospective students can enter chat rooms and exchange information with other people with common interests or experiences before they ever

communicate with anyone at the university where previously, students relied on reading printed materials or directly contacting the university.

Statement of the Problem

The profile of graduate students is shifting (Polson, 2003) and changing technology has altered the way in which prospective students research and choose a program (Merante, Huddleton, & Drexel, 2006). There has been little research informing marketing and admissions on the factors that influence graduate students in their decisions to enroll in a graduate program. The majority of research studies and college choice models focus on undergraduate students (Hossler & Gallagher, 1987; Hossler, Schmit, & Vesper, 1999; Long, 2003) and do not provide any sense of how graduate students go about the graduate study choice early in their decision process. In addition, the changing profile of graduate students makes effective recruitment and retention of cohorts of multiple generations challenging for institutions. The problem is how does a university inform and modify their marketing and admissions enrollment management strategies and processes to better serve the diverse needs of today's multigenerational graduate students while meeting their fiscal responsibilities and fulfilling their educational mission? Insights into how students make decisions about attending graduate school would be valuable to institutional policymakers and institutional leadership struggling to do more with fewer resources.

Purpose of Research

The purpose of this study was to identify and analyze the factors that have influenced business graduate students to enroll at a private university. Factors were categorized into six major marketing contexts: price, product, place, promotion, people,

and personal. Distinguishing between these six contexts is relevant in establishing what factors the university can or cannot influence as they relate to a student's decision to inquire, apply, and or enroll in graduate study. Findings of this study will inform graduate enrollment management marketing and admissions.

Research Questions

The research questions are:

1. Which factors, including interaction, academic ability, concerns, reasons to pursue a degree and perceived quality, influence the enrollment decision of graduate business students at a private university?
2. What items on the private university's website are essential to graduate students?
3. Counting the private university, to how many additional universities did the enrolled MBA student inquire at and or apply?
4. Is there a difference in parents' education as an influence on factors for enrolled graduate students?
5. Is there a difference in enrolled students' generational level as an influence on factors for enrolled graduate students?
6. Which marketing P had the strongest influence on the ultimate decision of enrolled MBA students?

Definitions

The study university is a private higher education institution in the United States offering a master's in business administration (MBA). The definition of terms follows in alphabetical order.

Admissions Representative is a staff member in the admissions department who conducts the admissions interview.

Admissions Interview is an on-campus meeting between the graduate prospect and the admissions counselor to discuss the program, application requirements and assess needs and interests.

An alumnus is a graduate of the university.

Business graduate students are defined as 27 years or older. Some needs were more important for graduate students 27 years and older versus younger graduate students (Barker et al., 1997). Another reason is that the average age of the graduate student at the study institution is 37 years old (Lake Forest, 2007).

Customer service is defined as the level of service provided to the prospective graduate student by the university in the process of inquiry, application, and enrolling.

Delivery format is the mode in which courses are offered such as online or onsite, in person, on- or off-campus.

Enrollee is an applicant who was accepted and started at the university.

Interaction is the university interaction or exchange of communication between a prospect and an admissions representative or a faculty member or alumni.

Financial barriers are possible reasons a graduate student may not apply or enroll at the university.

Location is defined as the distance from the prospect's residence to the university campus in miles.

Marketing is national or local advertising geared toward creating awareness and generating interest and inquiries for the university. Advertising may include internet marketing, direct mail, television, radio, college fairs, newspapers, or other periodicals.

Phone admissions meeting is defined as the initial telephone meeting between the inquirer and admissions representative.

Prospective student is a student who has inquired or applied at the university.

Schedule of courses is the date and time that online or on-site courses are offered to graduate students.

Researcher's Reflection

I am a mother of two young children, a wife, a devoted daughter to aging parents, a higher education executive, and pursuer of the Ph.D. dream. I belong to the growing population of graduate students whom I discuss in this study. Like many of these graduate students, I do not have time to spend on-campus as a full-time student immersing myself in academia. Yet I enrolled in a Ph.D. program with the belief that I could fit graduate study into my current life with a family and a career.

As a professional with 17 years of higher education experience, I have a stake in understanding what factors influence multigenerational graduate students to enroll in graduate school. On a deeper level though, I feel a personal leadership obligation to learn more about what universities can further do to support graduate students so they can discover their own solutions to pursuing their dreams and goals. My experience in pursuing my Ph.D. has been one of trying to be a nontraditional student in a traditional Ph.D. program.

I am a first generation college student. Because of my personal and professional experience, I notice that, in addition to becoming more intentional about marketing to potential students, universities need to understand them individually, and need to customize services within graduate enrollment management to fit the growing population of multigenerational graduate students. Graduate school has built-in challenges for this population of students trying to balance family and career while pursuing their education. The common theme I see is students who appear to be highly motivated and qualified, but choose for whatever reason, not to apply or enroll in graduate school. It is not to say that graduate study should not be challenging, for it should be academically rigorous. Where it should not be challenging is navigating the process of inquiring, applying, and enrolling. Universities need to find better ways to embrace students who want to make a change in their lives by enrolling in graduate study.

I sought the answer to what universities can do to improve their graduate enrollment management so that more students can pursue their dreams, so that universities will have fewer students drop out and become a negative statistic, and still meet their new student enrollment goals and graduation goals. Specifically, what can universities do to support and understand students in their initial exploratory stages of inquiring and applying to a graduate school? In addition, how can implementation of that knowledge into their graduate enrollment management process increase the university's return on investment per graduate? I am interested in finding a way to help more students achieve a lifetime educational goal. To do this, universities need more knowledge about effective graduate enrollment management and about their own students so they can begin to identify improvements in the graduate enrollment process.

Overview of Study

This descriptive and difference study follows the guidelines for quantitative research. This approach was selected to identify the factors that may or may not influence students' decisions. Electronic survey format was used to identify which factors influence the enrollment decision of business students who are currently enrolled at a private university. Business graduate students were identified and selected because the private university concentrates on the MBA program. In addition, business had the second largest number of conferred degrees (U.S. Department of Education, NCES, 2007) at the master's level.

The survey instrument was designed to look at two specific areas which are admissions and marketing in the enrollment management process. This focus was appropriate because the researcher is interested in isolating the impact of marketing and admissions on students' decisions to attend graduate school. The survey instrument groups those factors that graduate students may use to assess graduate programs before making a choice of one in which to enroll. The factors are grouped into six major marketing contexts. Distinguishing among these six contexts is important to establish what the university does and does not influence in the enrollment management process as it relates to decisions of graduate students.

The study university has been providing graduate business education for 60 years and focuses on the working professional so students can immediately apply their new learning to their current business setting. The average student age at the study university is 37, with an average of 13 years work experience with 100% employed full time; 60% of students have a nonbusiness undergraduate degree (Lake Forest, 2007). The study

university has three campuses: 1) one main campus located in a large suburban area, 2) one satellite campus located in the downtown of a metropolitan city, and 3) one satellite campus in a densely populated suburb. The MBA program may be completed in 22 months or up to four years. The majority of courses meet once per week with an accelerated summer format of twice per week. Courses are not limited to a cohort model. Admissions requirements include: 1) an admissions interview with an admissions representative, 2) current resume, 3) official academic transcripts, 4) two recommendation letters, 5) application with a personal statement, 6) official GMAT scores or equivalent work experience and academic background, or a graduate degree. The university has a high yield rate for those students who complete the application and admissions process. Assumptions for this study are that the vast majority of these students are graduate students over 27 years of age working full-time.

Theoretical Framework

Undergraduate college choice models with theoretical perspectives in econometrics, sociology, and information processing provide the theoretical background for this study on factors that influence students to enroll in graduate study. Key elements of enrollment management organization and strategy and integrated marketing concepts such as the four Ps: -- product, place, price, and promotion (Kotler & Keller, 2006) inform this study. These theoretical perspectives and concepts provide context and perspective to understanding how a university's current enrollment management practices originally developed and evolved.

CHAPTER 2: REVIEW OF THE LITERATURE

The following review of the literature seeks to understand the definitions and elements of enrollment management with specific emphasis and relatedness of marketing and admissions. This chapter is divided into six sections. The Enrollment Management section describes the history, evolution, and organizational structure of enrollment management. The College Choice section contains an overview of influential factors studied over the years. These factors also provide a foundational reference in the instrument development for this study. Undergraduate College Choice Models developed from research are discussed next. The Graduate Student Choice Studies section includes the work of several researchers who studied various aspects of graduate school choice and contributed to the current research pool of college choice literature. The Marketing and Admissions section highlights the purpose and current challenges that exist for universities to market their programs and target specific student populations. Admissions roles, past and present, along with similar challenges related to technology are included in this section. The sixth section is Generational Data profiling the differences among each generation and the institutional challenges in attracting and enrolling multigenerational students.

Enrollment Management

Enrollment management as an organizational function in higher education emerged in the mid 1970s as a primary solution for colleges and universities to improve recruitment and retention. Enrollment management is a systematic way to improve recruitment, admission, retention, and graduation of students (Hossler, 2004; Huddleston, 2001). The university functional units that make up enrollment management are

marketing, admissions, financial aid, student selection, registrar, student services, institutional research, retention, and advising (Lapovsky, 1999).

Three major forces shaped the development and delivery of enrollment management: 1) a complex set of financial aid programs to support dual college goals: access and choice, 2) a growing body of research on college choice and student retention, and 3) projections of a significant decline in future college enrollments (Coomes, 2000). John Maguire's work as dean of admissions in the early 1970s at Boston College invented the essence of enrollment management (Henderson, 2001), which is managing the interactions among admissions, financial aid, student retention, and the registrar in addition to the goals and strategies of each department. He also emphasized the relationship that enrollment management had to marketing.

Simultaneously with Maguire, Tom Huddleston, dean of admissions and financial aid at Bradley University in the 1970s, was integrating market research into his university (Henderson, 2001). His approach was very comprehensive and he felt marketing must address academic quality and reputation. His new marketing structure was led by the director of admissions, but encompassed admissions, financial aid, orientation, academic advisement, retention, and career advisement.

The essence of enrollment management was further defined and refined in the 1980s by Kemmerer, Baldrige and Green who focused on the both the concept and procedure of enrollment management (Coomes, 2000; Henderson, 2001). By focusing on the concept and procedure, they were able to create and describe concrete practical components of enrollment management. Kemmerer, Baldrige and Green are considered the structural strategists of enrollment management (Henderson, 2001).

Don Hossler, a leading academician known as enrollment management “...chief guru” (Henderson, 2001) stressed the importance of research in enrollment management and focused his enrollment management contribution on student choice. He emphasized the connections between marketing and admissions and among admissions, financial aid, and the impact each had on college choice. Hossler envisioned enrollment management providing a lens that helps the institution see itself through the students’ perspectives (Henderson, 2001).

In the late 1980s, Michael Dolence brought a strategic planning and implementation approach to enrollment management with his background in strategic planning; his new label was strategic enrollment management or SEM (Henderson, 2001). Dolence is credited with linking academics to enrollment management and for introducing Key Performance Indicators (KPIs) which measure performance and effectiveness at any stage of the enrollment management process.

True enrollment management is more than marketing and admissions. Seven functional areas (Henderson, 2001; Huddleston, 2001) play a key enrollment management role in institutions: 1) institutional research and planning 2) marketing, 3) admissions, 4) registrar, 5) financial aid, 6) student orientation/student services, and 7) retention and advising. Each of these key areas makes decisions that impact students at various stages of their college experience. For the purposes of this research study, marketing and admissions departments are further defined.

Marketing is charged with creating institutional awareness in the marketplace, discovering needs that can be met by the institution, and promoting academic quality to attract new students. The admissions department responsibilities are meeting enrollment

goals with high quality students despite an increasingly competitive marketplace and rising tuition costs. The unique responsibilities of each of these departments becomes more shared as information technology allows increasing numbers of students to both explore information about universities and obtain their education in online delivery formats. Ideally, enrollment management allows an institution to see itself from the students' perspective in all these key areas. Studies of undergraduate college choice provide important information in informing the marketing and admissions aspect of enrollment management.

College Choice

Many researchers (Hossler & Gallagher, 1987; Hu & Hossler, 2000; Paulsen & St. John, 1997; Schmit & Vesper, 1999) can attest to the fact that choosing a college is a very complex process that has a lasting impact in our lives. A working definition of college choice for the purposes of this study is: the factors which influence the decision to attend a particular college from the student's perspective. Copious amounts of information are dedicated to the topic of college choice. For instance, one major resource that chronologically describes half a century of college decision making is "Fifty Years of College Choice" (Kinzie et al., 2004). This document describes how the college choice process has evolved since the 1950s through the 2000s. While a useful resource and a wealth of information, this report primarily examines the social, political, and institutional influences on the decision-making process for traditional aged students.

Nontraditional undergraduate students begin to appear as early as the 1950s with the onset of the GI Bill encouraging veterans to enroll in school. "Total college enrollment in 1950 exceeded enrollment levels in 1940 by 1.1 million students, or 78

percent” (Coomes, 2000, p. 8). Nontraditional undergraduate adult students became more interesting to colleges and universities in the mid 1970s and 1980s due to the heavy competition among colleges for students and due to the decline in traditional aged students attending college in the mid 1960s and early 1970s. Some discussion of what influenced traditional students in the last 50 years is relevant to understanding how working business graduate students differ in their reasons for choosing a college.

In “Fifty Years of College Choice” proximity to home, cost, and family or relatives were major influences prior to 1950 (Kinzie et al., 2004) for students pursuing an undergraduate degree. The number of influential factors increased as time passed. Academic reputation, parents’ educational background, student gender, and socioeconomic status influenced undergraduate college choice in the 1950s (Kinzie et al., 2004). In the 1960s through the mid 1970s, researchers could see differences in the undergraduate choice patterns among influential factors and between students and parents starting to emerge. Four major groupings were identified as influential to college choice: 1) academic reputation, 2) prestige, 3) external factors including location and proximity to home, and 4) human influences such as personal and family input (Kinzie et al., 2004).

Financial aid was becoming a strong determinant; not so much the dollar amount, but the fact that it was offered to some students applying to colleges (Kinzie et al., 2004). An objective methodology for assessing a family’s ability to pay for college was developed and became known as a needs analysis. This development, along with the passage of the National Defense Education Act in 1958 (Coomes, 2000), created a need for financial aid offices within universities and colleges. Congress passed the Higher Education Act (HEA) in 1965 that authorized federal grants and guaranteed subsidized

student loan programs. The GI bill, federal and state financial aid, and the baby boom generation kept enrollments high. “By 1970, college enrollments had swelled to over 8 million students, an increase of 120 percent over the number enrolled in 1960” (Coomes, 2000, p. 10). That trend did not continue in the late 1970s when the number of high school graduates began to decline and the last of the Boomer generation was 18 years old in 1980.

Knowledge of college choice behavior became even more important to colleges and universities in the 1970s as a way to offset declining student enrollments, budget deficits, and increasing competition. Students became consumers of education with discerning preferences searching for a type of college experience ranging from traditional, vocational, occupational, or professional (Kinzie et al., 2004). Colleges had to figure out unique ways to attract students and influence their college choices. Decision making models began to surface as a way to explain the college choice process.

Undergraduate College Choice Models

Two models, econometric and sociological, emerged between 1975 and the 1980s to explain decision making (Kinzie et al., 2004) as related to college choice. Information processing models emerged next followed by combined choice models, the largest group having various combinations of the first three models. The literature on undergraduate college choice models is grouped into these four major types: 1) econometric models, 2) socialization or status attainment models, 3) information processing models, and 4) combined models (Hamrick & Hossler, 1996, Hossler & Maple, 1993; Hossler, Schmit, & Vesper, 1999). Each model is respectively rooted in the theoretical approaches of economics, sociology, and econometrics combined with information processing.

Generally, each model offers a different perspective on college choice behavior and the factors that affect college as well as the relationship among the factors. The four major types and their differences and similarities are discussed here.

Econometric Choice Models

Econometric college choice models follow a cost-benefit framework that assumes the choosing student is completely informed about the potential costs and benefits of both education and noneducation to arrive at a decision regarding college choice (Hamrick & Hossler, 1996; Hossler & Maple, 1993). In the model, students decide if they should go to college, go to work, join the military, get married, etc. This model also assumes that the choosing student and the student's family can list advantages and disadvantages for each option and have assigned a value to each option. The final decision about higher education, to attend or not, will realize the greatest perceived benefit with the lowest cost. Economic models tend to be objective, rational, and expand possibilities (Hossler, Schmit & Vesper, 1999) of alternatives to attending college such as joining the military, getting married, or choosing to enter the workforce – instead of going to college. Econometric models were based on a cost-benefit analysis weighing one or more of the perceived benefits of attending college, not attending at all, going somewhere else, or doing something different (Hamrick & Hossler, 1996; Kinzie et al., 2004).

Sociological/Attainment Choice Models

Unlike economic models that were based on cost and benefits, sociological models, also referred to as status attainment models, refine or narrow the number of possibilities related to college choice (Hossler, Schmit & Vesper, 1999). According to Hamrick and Hossler (1996) “status attainment models describe how variables interact

with one another as students make decisions about which college to attend” (p. 181).

Sociological models consider the linkages between an individual’s family background and education choice behavior (dictated by societal and family norms). For instance, behavioral variables such as grade point average interact with background variables such as family members who have attended college or friends to influence students about their choice or educational aspirations. Sociological models assume that behavioral variables interact with background variables (Hamrick & Hossler, 1996), but do not take into consideration the role of the institution or any external actions of the university that may influence college choice.

Information Processing Choice Models

Hamrick and Hossler (1996) draw on the work of Arthur Stinchmore to articulate that information processing models make decisions by using exclusionary statements, such as considering only small colleges, in the college selection process. Hamrick and Hossler suggest that information processing college choice models are a useful perspective for researchers even though information processing models do not have the concrete theoretical foundation that economics and sociology have as it relates to college choice. Information processing as it relates to college choice is simply a continuous cyclical development process where uncertainty is reduced when the output of one stage becomes the input to another stage – in the college choice process (1996). This approach to college choice puts the emphasis on the student who is gathering and processing the information (Hossler, Schmit & Vesper, 1999).

Combined Choice Models

These choice models combine econometric, sociological and/or information processing models to offer more depth and perspective to the college decision-making process. Combined models have more explanatory power than any model alone because the researcher can focus on or combine variables from all three domains (Hamrick & Hossler, 1996). There are four major combined models of college choice discussed: 1) Jackson's, 2) Chapman's, 3) Hanson and Litten's, 4) Hossler and Gallagher's (Hossler, Schmit & Vesper, 1999). All four models are discussed briefly with emphasis and empirical research for the Hossler and Gallagher model.

The Jackson model is student based and has three stages: preference, exclusion, and evaluation. The preference stage is based in sociological theory where academic achievement in high school, for instance, correlates with a desire to attend college (Hossler, Schmit & Vesper, 1999). Economic theory is the foundation for the exclusion stage where certain factors such as location or cost eliminate institutional candidates from the choice list. The evaluation stage is the process of evaluating the remaining institutions to make a final decision. Hossler and colleagues (1999) note that Jackson does depart from economic theory in that the final decision made may not have been as completely rational as economic theory prescribes.

The Chapman model has five stages: presearch, search, applications, choice, and enrollment. Chapman introduces both an individual and an institutional perspective that suggest interaction between the two perspectives that form a student's expectation about college life (Hossler et al., 1999). The individual perspective focuses on sociological characteristics such as: socioeconomic status, scholastic aptitude, educational aspirations

and academic performance. The institutional perspective is captured in external influences that include significant others, college cost, location, and programs along with marketing efforts.

Hanson and Litten proposed a five step combined college choice model that combines the Jackson and Chapman models (Hossler et al., 1999). The five steps are: having college aspirations, starting the search process, gathering information, sending applications, and enrolling. Throughout each stage, Hanson and Litten (Hossler et al., 1999) identify very broad sets of variables that influence the college choice process such as parental income and education, race, gender, academic ability, class rank, high school characteristics and those of the colleges; programs and curriculum, cost, size, and timeliness in responding to student inquiries.

Hossler and Gallagher developed a three-stage combined choice model that breaks college choice into three distinct stages. This simpler, three-stage model emphasizes the student rather than the institution (Hossler et al., 1999). Hossler points out that the college perspective of choice typically means identification and recruitment of students. In other words, most models have a funnel which begins with perspective students moving through recruitment stages, that eventually narrows at the bottom to include only those students who enroll. While Hossler acknowledges that colleges do, in fact, choose students, he believes that his combined model offers valuable insights from the students' perspective that begin before students even begin to research colleges.

The first stage of the Hossler and Gallagher model is predisposition where students formulate their plans to go to college and how their plans evolve as they explore options. This is similar to educational aspirations in the other models but the emphasis is

not on the intent to go to college but rather the decision to attend college (Hossler, et al., 1999). The second stage is the search stage where students begin the process of finding and evaluating possible colleges to attend. For Hossler and Gallagher (1987), this is the most important stage and the one most open to intervention or influences because students are making lists of potential colleges and evaluating and refining those lists in formulating new questions (Hossler et al., 1999). The third stage is the choice stage where students make a final choice from all the institution(s) they have considered and subsequently may apply to one or all the colleges that provide the best value with the greatest benefit for their choice set.

In the Hossler and Gallagher model, the influential factors for each of the three stages are divided into two categories: individual factors and organizational factors. Researchers Hossler and Gallagher (1987) note that individual factors interact with organizational factors to influence choice. “Although correlations between college attendance and these organizational factors in the predisposition phase are not as strong as the factors related to background characteristics, attitudes, and significant others, they are important and should not be overlooked” (p. 211). The framework of dividing factors into individual and organizational adopted in this research study is similar to the Hossler and Gallagher model and is discussed further.

In their study “Going to College” (1999), Hossler, Schmit and Vesper used the Hossler and Gallagher model and found that the influences on the college decisions of 9th grade students are different from the influences on the decisions of 12th grade students. In the predisposition stage, researchers found that the best time to influence postsecondary plans are before or during the first year of high school because 60% of students followed

through with their 9th grade plans for college and 70% of students followed through on their 10th grade plans. Results in the predisposition stage also confirmed research that parents play an important influential role in college choice.

The search stage showed that students were most actively involved in learning and gathering information about colleges late junior year through early senior year. In the choice stage, the type of school students considered remained stable even though the specific schools changed throughout the high school years. The junior high school year proved to be the greatest time of uncertainty and exploration where new information and new school considerations surfaced raising additional questions about which school to select. During their senior year, students narrowed their choice set, based on parental feedback about college costs, affordability and distance, and became more certain about the characteristics important in choice of college.

In summary, combined choice models have more explanatory power of college decision making because they combine econometric, sociological, or information processing models. This allows combined models to provide more depth, insight, and perspective to the college decision-making process.

While expansive research on college choice has advanced our understanding of how undergraduate traditional students go about their decision to attend college, comparatively, little research exists on graduate students and their decision process to attend graduate school. This affects university enrollment management efforts because marketing and admissions strategies, for instance, may be based on undergraduate enrollment management models and theory; there may be completely different factors

influencing graduate students on their college decision-making process that would inform and possibly alter enrollment management strategies.

While this researcher could find no model of decision making for graduate school, the decision to attend graduate school has been investigated by several researchers: Maleney (1987), Browning (2000), Cardon and Rogers, (2002) Punj and Staelin (1978), and Ivy and Naude (2004). The next section will examine graduate student choice by researcher. The Ivy and Naude study is examined in greater detail due to the application and adaptation of the four P marketing analysis framework for this study.

Graduate Student Choice Studies

Maleney (1987) found that the most important factor in choosing to attend graduate school was the desire to learn and the most important reason for choosing a particular institution was related to the academic department is reputation. In the study, Maleney identifies a theme predominant in the undergraduate literature related to student choice, the importance of gathering information about prospective students. He expands on that theme and its importance for market research in his study of graduate student recruitment to ask 1) why did the students decide to pursue graduate study, 2) how did they receive information about the program/school in which they enrolled, and 3) why did they apply to that school?

Maleney's study had a response rate of 51.1% or 1,073 returned questionnaires from enrolled graduate students in the autumn quarter. Maleney acknowledges that part-time students were underrepresented by half (1987) which does have an impact on implications for graduate students since they tend to be less than full time. His study

showed that different groups of individuals have different reasons for attending graduate school and for selecting an institution. “Part-time students were more likely to report wanting an advanced degree for professional reasons and for personal satisfaction, while full-time students were more likely to note that their field requires individuals to have advanced degrees to become professionals” (p. 253). He also noted that older students were more likely to apply because they had friends at the school or because of the location. There was so much variability among groups that Maleney advised administrators to conduct their own local market research studies before implementing recruitment plans.

In a study of major graduate research universities, researchers Anderson and Swazey (1998) asked 2,000 doctoral students how important certain factors were to their decision to attend graduate school. Similar to Maleney’s findings, over 75% of respondents stated that a desire for knowledge in the field of study was important. About 66% reported wanting to do research, 23% desired advancement, 16% desired a job that paid well, and 13% was changing career fields. This study on a doctoral population and for research universities is not entirely applicable to this study, which studies master’s level program, but does provide reference to influential factors of graduate study choice.

Cardon and Rogers (2002) found that personal goals and desires were the top factors that positively influenced technology education teachers to enroll in master’s level graduate programs. The sample was technology master’s and doctoral graduates who had completed a graduate program and provides relevance in terms of what factors influenced their decisions to enroll. University location was second highest for the master’s students; students with a doctoral degree rated geographical location as a barrier that impacted

their decisions. However, a limitation for application to this study is that the sample consisted of graduates who completed their master's or doctoral programs and does not provide any data on the decision process leading to enrollment.

In a study of "Graduate Student Enrollment: Toward a Model That Predicts Student Enrollment", Browning (2000) addressed how a small nonprofit graduate institute could predict enrollment based on analyzing data specific to student characteristics and institutional enrollment processes. The objective was to differentiate and predict enrollees from nonenrollees. The sample was accepted applicants for a master's level program in human relationships. Findings showed for all enrolled students, attending a student reception (.668) had the highest correlation with students who enrolled in school followed by attendance at an information session (.566). In addition to demographic data, the research variables were attendance at an information session, actual contact during follow-up phone calls, attendance at an open house, attendance at a student reception, referral source, and length between initial inquiry and application submission. This study, while informative to the graduate enrollment management field, cannot be generalized to other graduate programs such as the MBA due to the narrow focus of program of study. In addition, factors that influenced students' decisions to enroll in school once they were accepted may vary from institution to institution for many reasons.

Similar to the Browning study, findings from researchers Punj and Staelin (1978) address MBA graduate college choice from the point of acceptance. Punj and Staelin use a statistical model to determine and predict how students choose one school or another once accepted to one or more institutions. They were primarily interested in estimating

the influence of the school and the student characteristics on final college choice. Their sample of 177 matriculating graduate students had the opportunity of selecting among two or more MBA programs. Cost, quality, and distance from school to home were important factors in college choice once the application was accepted. Quality was hypothesized to be "...that a student seeks a school which is neither above nor below his ability level" (p. 593). While this study does include a broad program approach by using MBA students, this study does not identify for instance, what specific quality factors influenced students to enroll in the MBA program.

Researchers Ivy and Naude (2004) conducted an extensive study of graduate choice as it relates to marketing to explore if their 5Ps marketing analysis model accurately and realistically captured the factors students evaluated to select among business schools. Ivy and Naude based their 5P model on a traditional 4P analysis marketing model where the mix consisting of Product (MBA programs), Price (tuition and fees, and payment structure), Place (distribution method and accessibility), and Promotion (the marketing created and implemented to communicate with the target market) are analyzed to determine if marketing is successful. Promotion can consist of advertising, collateral materials, public relations, or face-to-face selling. Ivy and Naude add People, the fifth P to their model because "People involved in the process of a university education are crucial in defining a potential student's perceptions of it" (p. 404). The research methodology included a survey sent to 1,450 MBA students across 12 business schools in South Africa. The survey listed 25 items distributed among the five Ps that may be important to perspective students in the selection of an MBA program.

Content validity was assessed and reliability of the 25 item Likert scale was 0.904. The response rate was 35%.

Factor analysis was used to assess if each variable was explained by the factor. The researchers found seven unlinked items that they labeled Premium and added as the sixth P. Premium had a Cronbach's alpha of 0.856 and was defined as providing or acting as an incentive, something to which special value has been added (Ivy & Naude, 2004). The items were 1) on campus accommodations, 2) total credits required for the degree, 3) international student exchange opportunities, 4) computer lab availability, 5) cultural diversity of students, 6) residential requirements, and 7) size of MBA classes. They added a seventh P labeled Prominence because like Premium, the factor was extremely robust with a Cronbach's alpha of 0.761. Prominence included 1) reputation of the academic staff, 2) national reviews, and 3) information on the institution website.

The researchers note that "To make the 7P model a useful marketing planning tool it is important to determine which elements of the marketing mix are most important to the target market" (p. 414). Range of electives and choice of majors in the MBA degree, which fall into the Program marketing mix, were the most important factors rated by students in the selection of an MBA program. The aspect of price was third followed by the prospectus and marketing view book, ranking fourth. People ranked fifth. Within the People marketing mix, the second highest variable was attending an open day session. Promotions ranked second to last and Premium was last; both had mean scores below the midpoint indicating that these marketing components were not particularly important to students in the selection of their MBA program. Findings showed that the original 5P model was not sufficient in explaining the factors that influenced students to select a

graduate program and that the 7P model is more useful to approach marketing to MBA students. While this is the most extensive study to connect marketing with graduate student choice, the findings may not be applicable to United States educational institutions.

The *Wall Street Journal* (Srivastava, 2008) reported a study that asked 4,060 students and company employees to rank executive MBA programs. The rankings shed some light on how they chose an MBA program. The top factor that emerged was reputation with 78% of students saying they considered their school because of distinguished faculty. Cost and location were unimportant when it came to selecting a program.

These varied conclusions among researchers who explored the graduate decision-making process suggest that there is little conclusive evidence of the factors influencing students' decision process to attend graduate school. The studies do support that specific marketing intelligence and how to apply it within enrollment management strategy remains an opportunity for colleges and universities.

Marketing and Admissions

Kotler and Keller (2006) state that “marketing management is the art and science of choosing target markets and getting, keeping, and growing customers through creating, delivering, and communicating superior customer value” (p. 6). Colleges and universities are marketing and producing educational programs as their products. The central task of marketing in education is to understand what the customer wants, examine what the university provides, understand how the university is externally perceived, and determine how the university can adapt to better satisfy what the customer wants (Kirp, 2003).

Successful marketing and promotional strategies need to address academic quality and reputation, create awareness in the local, national, or international community, and positively differentiate oneself from the competition and generate inquiries. So how does marketing accomplish that given the varied student profiles of today's business graduate student? What tools, processes, and strategies are marketing departments using to determine where to invest precious dollars to attract multigenerational students to their particular schools?

Recognizing that marketing is not new to higher education and the reliance on marketing in enrollment management, there is a general lack of understanding of what marketing is and how marketing concepts connect or relate to marketing research, product development, price, place, promotion. (Ivy & Naude, 2004; Kotler & Keller, 2006). For instance, the Four Ps of marketing: product, price, place, and promotion, are a traditional integrated marketing strategy used to create, communicate and deliver value for consumers. The Four Ps represents the sellers' view of the marketing tools available to influence the buyer (Kotler & Keller, 2006). Lauterhorn (1990) criticized MBA programs that still taught the Four Ps in their curriculum because it is no longer a post World War II production world. He stated that the Four Ps served marketing well for a long time but are now passé and should be replaced with the four Cs. In Lauterhorn's Four Cs model, Product becomes Consumer wants and needs, Price becomes Cost to satisfy, Place becomes Convenience to buy, and Promotion becomes Communication.

Whether the labels are Ps or Cs, critically important is marketing research must be done and the strategy behind the marketing concepts being delivered today need to be strategically linked to the message and product being delivered. The labels P or C do not

necessarily have to change but the strategy behind them and their connection to marketing research, planning, and results must be present and relevant to reach students in an age of technology. One model or one size marketing does not fit all students. The dramatic surge of information available on the internet has altered the familiar ways of marketing and student recruitment for admissions offices.

The internet has become a huge tool in marketing to prospective students, replacing or diminishing the effect and influences that direct mail, print, and television advertising used to have on generating interest, awareness, and inquiries for programs. Findings from a recent national survey on website usage showed that over 80% of graduate study search was on the web (Merante, Huddleston & Drexel, 2006). Colleges and universities are struggling to match prior response rates and conversion rates (the number of applications that result from the number of prospective students who inquired) from internet marketing. Admissions is struggling with how to begin to form a relationship and how to create value with prospects who they may not speak to until prospects are further along in the decision process. Internet marketing has resulted in fewer prospective students directly contacting a university admissions officer in the early phase of gathering information or making their decision to attend graduate school. This, in turn, has altered the way that university admissions departments operate.

To address those struggles, a university must understand how their prospective students' searching behaviors have changed. Searching behaviors shifted in the late 1970s and 1980s during the decline of projected enrollments when prospective students became consumers of education searching for a specific type of college experience (Kinzie et al., 2004). In her article "Turn Down the Volume on the Pain," Norris (2007) points out

“Prospective students had no choice but to come on your campus for a visit because it was the only avenue to information” (p. 2). Today, students can access much information via the internet without contacting university admissions staff until they are much further along in their decision process.

Historically, the dean of admissions (Coomes, 2000) and admissions officers were processors of paperwork (Swann & Henderson, 1998). That role still exists at many universities where admissions officers facilitate application completion to meet enrollment deadline dates. The admissions role varies among institutions depending upon their enrollment management strategy and their admissions philosophy. In the past, prior to the wealth of information available via the internet, a prospective student seeking more information would contact the university directly or indirectly by responding to a direct mail piece or a television ad. The university admissions representative could mail printed collateral materials about the university or attempt to contact the student directly and proceed to answer questions. The admissions representative would have an opportunity to pre-qualify and ask the prospective student questions about their academic background, career interests, etc. During this two-way communication between the prospect and the admissions officer, a relationship begins to unfold and take shape building the foundation for Black’s (Henderson, 2001) two universal enrollment management principles: 1) students are influenced by relationships, and 2) students want to be treated as individuals.

The difference now is that prospective students have virtual internet access to volumes of information before coming into contact with a university admissions representatives. “With technological advances and new ways of getting information, the role of the admissions reps is no longer to help prospects find out what is missing in their

lives” (Norris, 2007). As a result, the two-way communication dynamic of how admissions personnel and prospective students interact has been reduced dramatically because more information is available on the web and because marketers advertise more on the web for new student inquiries.

Marketing has the increased challenge of addressing academic quality, reputation, community awareness, and competitive differentiation to a diverse student market via university web sites. Lewison and Hawes (2007) state that years ago, higher education administration used mass marketing strategies focused on how consumers were similar and fit messages to a one size fits all strategy. As competition increases and resources diminish, universities need to change that strategy and recognize differences among potential students in their market and adopt a targeted marketing approach. Researchers Lewison and Hawes (2007) reference that the change over the last decade in “...student demographics, psychographics and behavioral characteristics has contributed to the ‘age of individualism’ in which the ‘customers as individuals’ theme has become a dominant force in defining the higher education marketplace” (p. 18). This age of individualism is completely aligned with Black’s universal enrollment management principle (Henderson, 2001), students want to be treated as individuals.

As mentioned earlier, every university is engaged in marketing and some form of advertising on the web, and the internet has become a tool in trying to regain some of the results that direct mail, print, and television used to have. Understanding how a university has targeted prospective students via use of the web/internet in their graduate school search process and how they may be generationally different from other prospective student populations is key for marketing.

Generational Data

Generational challenges may not be new to higher education given how the GI bill brought in many nontraditional aged students to college. However, what is new are the generational challenges that exist as prospective graduate students use technology to conduct research on graduate schools they are considering.

Strauss (Lowery, 2001) supplies a definition of generation: A generation is on average 20 to 22 years long and is comprised of a series of birth cohorts who have a collective identity due to a time in history and due to shared experiences. Some debate about dates of generational lines exists so the information for this study will reference Howe and Strauss (2002) timelines and will begin with the Boomer generation born between 1943 and 1960. Howe and Strauss are referenced because they explored generations from the educational perspective. Each generation has different values, experiences, styles, and attitudes, which shape their decisions.

Howe and Strauss describe the generation of potential graduate students called Millennials (2002) also referenced as Generation Y or Gen Yers (Chester, 2008) who graduated from high school after the year 2000 and could potentially have become graduate students as early as 2005, if they attended graduate school immediately following undergraduate studies or as late as 2010 if they waited 5 years or so. In a longitudinal study of graduate students by the U.S. Department of Education (2007), researchers studied and found that on average, students entering MBA programs typically waited four years after completing their undergraduate degree to enroll in graduate school. This generation is not following the preceding Generation X's perspectives, which are characterized by short time horizons, entrepreneurial thinking, and pessimism

about their economic future (Chester, 2008; Howe & Strauss, 2002). On the contrary, Millennials are much more optimistic, rule followers, team oriented, conservative, agree with the values of their parents, trust their parents, and have an increased interest for going to college as opposed to their predecessors (Howe & Strauss, 2002). Table 1 shows a comparison of size, major influences, characteristics, and work perspectives for three generations.

Boomers were the second largest generation to date at 77 million and are characterized by optimism, narcissism, impatience, and known for being very involved (Westman & Bouman, 2006) and demonstrative about current events. Generation X or Baby Busters, born between 1961-1981, are smaller at approximately 57 million (Kotler & Keller, 2006), and sandwiched between the Boomers and the Millennials. Many Generation Xers grew up as latchkey children as divorce rates increased and women took a more active role in the workplace (Westman & Bouman, 2006). As a result, Generation X married later than Boomers and tried to reestablish the family unit that was fractured or entirely missed when they grew up.

Millennials, sometimes referred to as Generation Y, were born between 1982-2002 and are the largest generation to date at 80 million and includes three more years than Boomers (Westman & Bouman, 2006). They are connected multitaskers due to growing up in the information technology age. They have a strong connection to family and are accustomed to parents being involved in every aspect of their life. According to Strauss (Lowery, 2001), Millennials have seven key attributes: conventional, confident, special, sheltered, pressured, achieving, and team oriented. Strauss states that teens

dislike the term Gen Y because it is an extension of Gen X and they definitely want to differentiate themselves from Gen X and feel new and unique (Lowery, 2001).

Westman and Bouman (2006) introduced the Gamer generation which is comprised of an intergenerational blend of everyone under the age of 36 and late Boomers and Generation Xers born in the late 1950s and early 1960s who never lost their fascination with video games. The term “intergenerational blend” of the Gamers generation could be applied to multigenerational graduate students because whether or not they play video games, the graduate student could be a member of Millennial, Generation X, or Boomer. Because of this intergenerational blend of students, enrollment managers and universities face the challenge of reaching prospective students in all generations to sustain growing enrollments.

Given the reliance on internet marketing for student recruitment, it is useful to understand how universities should create interactive websites to attract students. Merante, Huddleton, and Drexel (2006) conducted a national survey on website usage in the graduate school search for approximately 2,200 graduate students at four different stages of graduate school choice: 1) identification, 2) visit, 3) application, and 4) final choice stage. Over 80% of school search research is done online. MBA students begin their active search more than one year in advance of applying. MBA students showed the highest level of importance for school websites during the identification stage.

Table 1
Generation Type Comparison

	Boomer or Me Generation 1943-1960	Baby Busters or Generation X 1961-1981	Millennials or Generation Y 1982-2002
Size	77 million	57 million	80 million
Influences	Suburbs TV Vietnam Human rights Drugs Rock 'n roll	Sesame street MTV Personal computers Video games Divorce	Information technology Natural disasters Violence
Key word	Optimistic	Skeptical	Realistic
Values	Personal growth Health and wellness Work Involvement	Freedom Work life balance Global thinking Fun	Civic duty Diversity/change Meaningful work Personal safety
Characteristics	Competitive Narcissistic Impatient, Opportunists	Independent Pragmatic Latchkey children Resourceful Self-reliant	Conventional Confident Connected to family Modest Ambitious Sheltered Special
Education Perspectives	Tell me what to do.	Show me how to do it	Why do I need to learn this
Work perspectives	Career builder Driven Team players People pleasers Process oriented Sensitive to feedback	Career portability Highly adaptive Technology literate Creative Results oriented Impatient Work life balance Institutional distrust	Parallel or multiple careers Multitaskers Technology experts Collaborative Ongoing learners

The researchers note that specifically for master's level, the web message should focus on the features and benefits of a specific program rather than on the overall graduate school brand. The top five important valued web tools or content for MBA students showed admission requirements most important, academic programs next important, online applications and scholarship were tied for third and fourth importance. Financial aid information was fifth. The bottom five valued web tools or content were 1) podcasts, 2) instant messaging, 3) blogs, and 4) chat rooms. Least important to this population was 5) current student contact tools. Program specificity was 5-15% more important than the overall graduate school reputation, with the exception of MBA students who rated school reputation higher than nonMBA students.

This concludes the discussion of enrollment management, college choice models and studies, marketing and admissions, and generational data that provides the theoretical background or informs the framework for this study. The framework adopted in this research study is similar to the Hossler and Gallagher model because this study is interested in the *students' perspective* of factors that influence their decisions to enroll. This study integrated and expanded the 4P marketing concept to 6Ps to inform marketing and admissions. The marketing 6Ps are further linked to Individual Student Factors (ISFs) or University Organizational Factors (UOFs).

CHAPTER 3: METHODOLOGY

This chapter is divided into four sections. The Research Design section describes data collection procedures. The Data Collection Instrument section describes how the instrument was developed, identifies the key constructs to be measured, and discusses the research questions. The Sample section describes the participants and their selection, the pilot test, and the survey administration plan. The final section is the Data Analysis Plan, which describes the plan to prepare, analyze, and interpret the data.

Research Design

Quantitative research methodology was used to identify the factors that may or may not influence students' decisions. Using electronic delivery, this study looked at factors that influenced the enrollment decision of current enrolled business graduate students.

The master's of business administration (MBA) graduate program was selected because this program is the primary offering at the university and there is a university-wide initiative to increase enrollment in the MBA program. The university focuses on the working professional, with 100% of students employed full time with an average age of 37. Admissions requirements include: 1) an admissions interview with an admissions counselor, 2) current resume, 3) official academic transcripts, 4) two recommendation letters, 5) application with a personal statement, and 6) official GMAT scores, equivalent work experience and academic background, or a graduate degree. Information collected from students when they initially inquire at the university include: first and last name, address (including country), phone number, email address, campus location of interest, program of interest, and how they heard about the university.

Data Collection Instrument

The survey instrument focuses on the recruitment process for graduate students at the university. Specifically, the survey instrument looked at two areas of enrollment management, marketing and admissions as they relate to new student recruitment in the business graduate programs at the university. The research questions that guided this study are:

1. Which factors, including interaction, academic ability, concerns, reasons to pursue a degree and perceived quality, influence the enrollment decision of graduate business students at a private university?
2. What items on the private university's website are essential to graduate students?
3. Counting the private university, to how many additional universities did the enrolled MBA student inquire at and or apply?
4. Is there a difference in parents' education as an influence on factors for enrolled graduate students?
5. Is there a difference in enrolled students' generational level as an influence on factors for enrolled graduate students?
6. Which marketing P had the strongest influence on the ultimate decision of enrolled MBA students?

The relevant constructs measured in this instrument were the influences of 1) interaction, 2) reasons to pursue a graduate degree, 3) concerns, 4) academic ability, and 5) perceived quality on the students' decisions to enroll in graduate study. The basis for including these constructs is that each may contribute to influencing enrolling in graduate school.

Instrument Development.

The instrument is comprised of 62 Likert items based on levels of influence. The 62 items are mapped to one of the six constructs and to one of the six Ps marketing framework (Table 2). A pool of perceived quality indicators was developed by surveying a graduate class of current Ph.D. students at another university. Students were asked “What are indicators of quality potential graduate students may use to assess graduate programs before making a choice of one in which to enroll?” Responses to this question were incorporated into survey items 26-48 (Appendix A). This group of graduate students was also asked to “identify any concerns that potential students may have about beginning graduate study.” Responses were incorporated into survey items 17-20.

Ten items, numbers 7-16, were asked on the instrument to determine the reasons that prompted enrolled students ultimately to enroll in graduate school. Fourteen items, numbers 49-62 are related to identifying whether essential or not when seeking information about enrolling at the university.

Table 2 shows a summary of topics, the number of items for each topic, and where the data are categorized into a marketing six P framework. The six P marketing framework was adapted from the Ivy and Naude (2004) study where the four Ps--price, product, promotion, and place--are analyzed to determine if marketing realistically captures the factors related to MBA school choice. Two additional P's, people and personal, were included in this study. People represents the interaction that prospective students may have with admissions, faculty, or alumni at the university. Personal represents the individual internal factors that may influence a student's decision to enroll in graduate study.

Table 2 also designates each construct as individual student factors (ISFs) or university organizational factors (UOFs). This designation is adapted from the Hossler and Gallagher model (1987) because the university can control some factors and some factors only the student can control. These designations are important when applying the findings to improve marketing and admissions within enrollment management strategies.

Table 2
Summary of Original Constructs

Construct	# of Items	Information Collected	Marketing Framework	ISF or USF Designation
Interaction	6	Interaction impact between the student and admissions staff, faculty, alumni or current students.	Promotion People	UOF
Reasons to Enroll	10	Reasons for enrolling in the MBA program.	Personal	ISF
Concerns	4	Extent of concerns when enrolling in graduate school.	Personal	ISF
Perceived Academic Ability	5	Perceived academic ability to be successful in the program.	Personal	ISF
Quality indicators	23	Indicators to assess graduate school in the decision to enroll.	Product/ People/ Promotion/ Price/Place	UOF
Web site purpose	14	Essentiality of items on the university web site.	Promotion	UOF
Sub Total	62			
Demographic	9	Birth date or year, gender, race, parents' level of education, length of search, comparative shopping, and tuition reimbursement.		
Total	71			

Individual Student Factors.

The individual student factors (ISFs) help to understand which individual or internal factors may influence a student's decision to attend the university. The university has less control over these factors because they are personal and unique to the student experience. Polson (2003) states that "adult graduate students often must negotiate with

families, employers, coworkers and friends to establish priorities, time, commitments and responsibilities” (p. 63). The university may be able to indirectly assist or support a student with the decision to enroll in graduate study once they better understand the influence of these internal factors. Below are the initial constructs grouped in individual student factors (ISFs).

1. Reasons to enroll in an MBA program.
2. Concerns enrolling in graduate school.
3. Perceived academic ability to be successful in the program.

University Organizational Factors (UOFs).

The university organizational factors’ (UOFs) are external to student personal experiences. The university has more control over these factors because they are part of the university organizational processes and are subject to change. The university can alter or adapt the influences that may directly relate to student decisions to enroll in graduate school and can tailor them to more individualized needs. The university will better understand the types of students they are attracting and enrolling based on current practices. Findings from the external UOFs may provide an incentive to change and improve the process for graduate students. Below are the UOFs grouped in the university recruitment process.

1. Interaction impact between the student and admissions, faculty, or alumni.
2. Quality indicators of the graduate program.
3. Essential items on the university website when seeking information.

Demographics.

Demographic data were obtained on the survey. Reasons for including these demographic variables are stated here.

Questions 1-3: Age, sex, and race of participants. Patterns or relationships may emerge among age, gender, and race. The reason for including age was to determine generational membership. Gender was included to identify the proportion of women and men. Race was included because the university has diversity goals.

Questions 4-5: Parents' highest education level was asked because in a recent longitudinal study by U. S. Department of Education, researchers noted that the likelihood of earning a graduate degree was related to parents' highest education level (2006).

Question 6: When the search began was asked to gain a sense of length of search prior to application.

Question 7-8: Comparative shopping is the number of other graduate schools to which a student inquired and or applied.

Question 9: Respondents were asked if they have tuition reimbursement and if they do, to indicate the annual percentage or dollar amount. This question was added after the pilot test, when respondents indicated that this item has some influence on their enrollment decision.

Sample

Subjects consisted of men and women of all races and ethnic backgrounds currently enrolled in the MBA program at the study university.

Pilot Testing.

The researcher sought and received permission to pilot the survey with a group of current students. Pilot testing included the actual survey and questions about the survey. A hard copy was used for pilot testing to discuss the survey with the respondents as a group. Items addressed with pilot respondents included pilot testing purpose, length, and duration. Respondents were specifically asked:

How does the survey flow?

Which items were difficult to understand?

Are there other possible items that influenced the respondent's decision?

Are the survey questions repetitive in any way?

The pilot survey response rate was 100%. The single concern over survey flow was that it was hard to remember the question on the hard copy survey because the question was not restated on the top of each page; this concern was addressed on the electronic copy where the question repeated at the top of every screen.

Two items were difficult to understand. The first was the question on essential website items. The original question asked students to check which items were essential to them at the time of enrolling and which are essential to them now. This was confusing to all pilot respondents. In the final survey, the question was refined to ask which website items would be essential to them now.

The second item that was difficult to understand for one student was the term *academic rigor* but it was clear for other students; this item was not modified in the final survey. Talking with enrolled coworkers emerged as another possible item that

influenced their decisions; this item was added to the instrument under the interaction construct.

In response to the question, “were there other possible items that influenced your enrollment decision”, the pilot group shared that having tuition reimbursement from their company had some impact on their decision to enroll. After probing, the amount of company tuition reimbursement varied. Because of this discussion, two tuition reimbursement questions, one close ended and one open ended, were added to the instrument in the demographic section.

The average length of time to complete the survey was 12 minutes. As stated by Fink (2006), reliability was tested by looking for failure to respond to items, noting if there were more answers to a single item than choices and any comments written in the margins. The intent was to have the respondents complete the survey first and return to note comments in the margins. All items had responses. There were no concerns about repetitive questions.

Content validity, the extent that the instrument measurement reflect the intended construct to be measured, was assessed two different ways (Gilner & Morgan, 2000). First, pilot respondents were asked if the survey captured the most probable responses to the questions. Aside from the added questions regarding tuition reimbursement and an enrolled coworker, their responses were yes, the survey captured the possible responses. Second, perceived indicators of quality and the identification of concerns to attending graduate school were obtained by asking a class of current graduate students for their response to those questions (C. Makela, VE707, personal communication, November,

2005). Their responses were incorporated into the survey. The final survey included 62 items and 9 demographic questions.

Survey Administration.

The modified instrument was administered electronically. Permissions from the private university and approval of the CSU human subjects committee were received prior to the survey administration (Appendix B). The permission request letter to the private university included a description of data collection and how the information would be useful to the organization. Anonymity regulations were honored.

A cover letter (Appendix C) was emailed to all respondents explaining the purpose of the study with the URL for the survey. Survey respondents were given three weeks and an opportunity to receive an incentive to complete the survey. There was one reminder email at the beginning of week three to increase the response rate.

Data Analysis Plan

This was a cross sectional design because the data were collected at one point in time (Fink, 2006). Descriptive statistics were used to calculate means and standard deviations for the items among the constructs.

Reliability was tested using Cronbach's alpha to test internal consistency (Gilner & Morgan, 2000) and to assess the items grouped into the six P marketing framework. It was possible that instead of needing 23 survey items measuring quality, fewer items may be as reliable. Factor analysis was conducted to delineate/validate the factors and to reduce the number of items.

Inferential statistics, ANOVAS, were conducted to test for differences among the 6 marketing Ps, and parents' education (3 groups), and respondents' generations (2

groups). See Table 3 for detailed analysis. The two corresponding hypotheses were: 1) there is no difference among the influence of the six marketing Ps and parents' level of education for enrolled students, and 2) there is no difference among the influence of the six marketing Ps and generation level for enrolled students.

Table 3
Research Questions and Planned Analysis

Research Question	Survey Questions	Level of Variable	Statistics and Analysis
RQ1: Which factors including interaction, academic ability, concerns, reasons to pursue a degree and perceived quality, influence the enrollment decision of graduate business students at a private university?	1-48 4-point Likert Scale Strongly influenced to No influence	Ordinal Variables = interaction, academic ability, reasons and quality.	Descriptive statistics Rank order from Strongly influenced to No influence Factor Analysis
RQ 2: What items on the university's web site are essential to graduate students?	49-62 4-point Likert Very essential to Not essential	Ordinal Variable = essential website items	Rank order each item within construct
RQ 3: Counting the private university as one, to how many additional universities did the enrolled MBA student inquire at and or apply?	Demographics 6-8 Response: 1,2,3,4,5+ and 1,2,3,4,5,6,7,8,9, 10+	Ordinal Variable = additional universities inquired or applied	Rank order
RQ 4: Is there a difference in parents' education as an influence on factors for enrolled graduate students? Hypothesis: There is no difference among the 3 groups of parent education in influential factors.	Demographic 4-5 Categorical response: Neither, one, or both	Nominal Variable = influential factors	ANOVA
RQ5: Is there a difference in enrolled students' generational level as an influence on factors for enrolled graduate students? Hypothesis: There is no difference among the enrolled students' generational level in influential factors.	Demographic Year of birth	Nominal Variable = influential factors	ANOVA /t Tests
RQ6: Which marketing P had the strongest influence on the ultimate decision of enrolled MBA students?	Use newly formed marketing P framework resulting from factor analysis of 1-48	Nominal Variable = 6 Ps scores.	Compare group means for each marketing P

CHAPTER 4: FINDINGS

The findings of this study on factors that influence graduate students to enroll in an MBA program are presented in this chapter. Descriptive statistics are presented to provide a profile of the graduate student respondents and as a foundation for interpreting the results of the statistical analyses. Findings for each research question are reported. Factor analysis was conducted prior to answering research questions four, five and six.

Graduate Students

The analysis involved 341 enrolled MBA graduate students. The instrument was electronically administered to 934 students at the end of spring quarter 2008. Three hundred forty-one were completed for a response rate of 36.5%. A profile of graduate student respondents, including gender, age and ethnicity is presented in Table 4. The average age was 40, males had a higher percentage (59%), and Asian (12%) was the second highest ethnicity after White (77%).

Contributing to the profile of graduate students, 340 students responded to the question “Do you have tuition reimbursement at your place of employment? Two hundred and ninety-one students (85.6%) indicated they have tuition reimbursement (Table 5). If respondents answered yes, they were asked the percentage or annual dollar amount for tuition reimbursement. Of the 291 students, 25 students had no annual dollar cap. Tuition reimbursement ranged from 40 to 100%. Fifty four students had capped tuition reimbursement; the most frequent amount was \$5,000 - \$7,499 annually (n = 36).

Table 4

Profile of Graduate Student Respondents (n = 309)

Demographic		N	%	
Gender				
	Male	199	59	
	Female	139	41	
	Did not state gender	3		
	Total	338	100	
Ethnicity				
	White	256	77	
	Asian	41	12	
	African American Nonhispanic	19	6	
	Hispanic	11	3	
	Native Hawaiian or other Pacific Islander	2	.6	
	Biracial	2	.6	
	Did not state ethnicity	10		
	Total	331	100	
Age			Mean	SD
	Did not state years	32		
	Total	309	39.75	7.33

Table 5
Student Respondents With Annual Cap Tuition Reimbursement

Have Tuition Reimbursement	Yes		No		Total	
	N	%	N	%	N	%
	291	85.61	49	14.4	340	100
Tuition Reimbursement: Annual percentage, no dollar cap	N	%				
100	16	64				
70-90	6	24				
40-60	3	12				
Total	25	100				
Tuition Reimbursement: Annual dollar cap						
7,500-10,000	15	28				
5,000-7,499	36	67				
1,800-4,999	3	5				
Total	54	100				

Understanding Enrollment

This study sought to answer six research questions.

Factors Influencing Enrollment (RQ #1)

Which factors, including interaction, academic ability, concerns, reasons to pursue a degree, and perceived quality, influence the enrollment decision of graduate business students at a private university?

The relevant constructs measured were the influences that interaction, academic ability, concerns, reasons to pursue a degree, and perceived quality, have on students' decisions to enroll in graduate study. The basis for including these constructs was that each may contribute to influencing graduate enrollment.

Respondents were asked to respond to 48 Likert items based on levels of agreement from strongly influenced to no influence. Each of the 48 items was mapped to a construct, to a marketing P, and to an Individual Student Factor (ISF) or a University Organizational Factor (UOF). These mapped designations are important when applying findings to improve marketing and admissions enrollment management strategies. ISF and UOF designations are adapted from the Hossler and Gallagher model (1987) because the university can control some factors and some factors students control. The marketing P framework is modeled after the traditional 4P marketing mix with two additional Ps, people and personal.

The constructs are addressed in the order listed in the research question. Findings for interaction, reasons, concerns and academic ability are shown in Table 6. Items are rank ordered by their strength of influence within the constructs interaction, reasons, concerns, and academic ability. Higher values indicate less influence. Due to the large number of items that represent indicators of quality that graduate students used to assess the graduate program, they are shown separately in Table 9.

Interaction.

Concerning interaction, six items were evaluated. The two highest rated items by enrolled MBA students were meeting in person with admissions ($M = 2.01$, $SD = .97$) followed by visiting the university ($M = 2.15$, $SD = 1.10$).

Reasons.

Nine items were evaluated for reasons that prompted students to ultimately enroll in graduate school. Four of these nine had mean scores below 2.0. Two of the four items had very close mean scores with increasing my knowledge at 1.20 (SD = .45) followed closely by obtaining a new skill at 1.28 (SD = .56). The next two items with means below 2.0 were potential for increased pay at 1.85 (SD = .93) and achieving credibility at 1.97 (.97).

Concerns.

Concerns that potential students may have about beginning graduate study contained four items. Three items had mean scores below 2.00 with the ability to balance work and school being the greatest influence at 1.72 (SD = .99).

Academic Ability.

None of the four items measured in perceived level of academic ability to handle the program resulted in a mean score below 2.00 indicating that these four items did not strongly influence students' enrollment decisions.

Table 6
Items Rank Ordered By Strongly Influenced Enrollment Decision (N = 341)

Construct	Item	Mean	SD
Interaction	Meeting in person with admissions	2.01	.97
	Visiting the university	2.15	1.10
	Personal contact with enrolled coworker	2.50	1.25
	Personal contact with alumni	2.61	1.16
	Interaction with faculty	2.65	1.02
	Speaking with admissions by phone	2.79	.98
Reasons	Increasing my knowledge	1.20	.45
	Obtaining new skill set	1.28	.56
	Potential for increased pay	1.85	.93
	Achieving credibility	1.97	.97
	Sheer love of learning	2.08	.91
	Career change	2.45	1.13
	Anticipation of losing job	3.15	1.05
	Mentor prompting	3.23	.99
Concerns	Boss prompting	3.28	1.00
	Ability to balance work/school	1.72	.99
	Ability to pay for school	1.96	.99
	Reap the benefits of MBA degree	1.99	.82
Academic	Handling the academic rigor	2.14	.89
	Meeting required work experience	2.57	1.12
	Meeting GMAT scores	2.99	1.12
	Meeting minimum GPA	2.94	1.06
	Identifying two recommenders	3.02	1.05

Values are the means on a 4-point scale (strongly influenced = 1, no influence = 4)

Ninety-two respondents answered the open-ended question that asked for other items that influenced their enrollment decision. Worthy of note is that 26% of the 92 open-ended responses are related to location and convenience (Table 7). Teaching faculty in the field and company sponsorship each received six responses. The other items received one to five responses; the detail can be found in Appendix D.

Table 7
*Other Influences Identified From Open Ended Question,
 Ordered By Number of Responses*

Other Factors	Number of Responses
Location and convenience	24
Faculty in field/professionals	6
Company sponsorship	6
Other influential factors	56
Total	92

Quality indicators are the items used to assess a graduate program before making the ultimate decision of the one in which to enroll. Of 23 items that made up the perceived quality construct in Table 8, the five perceived quality items having a greater influence on enrollment with means below 2.00 are: commuting distance ($M = 1.36$, $SD = .66$), courses offered at times that fit my schedule ($M = 1.41$, $SD = .71$), professional background of faculty ($M = 1.73$, $SD = .89$), university accreditation ($M = 1.77$, $SD = .82$) and university academic reputation ($M = 1.78$, $SD = .76$). The bottom four perceived quality items where the average mean is above 3.00 are: 1) transfer credit policies ($M = 3.54$, $SD = .83$), 2) having a research focus in the program ($M = 3.25$, $SD = .88$), 3) courses offered part online ($M = 3.16$, $SD = 1.00$) and 4) advertising in the local market ($M = 2.98$, $SD = .95$); these four items appear to have little influence on enrollment decision.

Table 8

Quality Items Rank Ordered From Strongly Influenced Enrollment Decision (N = 341)

Construct	Item	Mean	SD
Quality	Commuting distance	1.36	.66
	Courses offered at times for my schedule	1.41	.71
	Professional background of faculty	1.73	.89
	University accreditation	1.77	.82
	University academic reputation	1.78	.76
	Programmatic accreditation	2.03	.92
	Total duration of program	2.11	.93
	Tuition and fees	2.14	1.00
	Frequency of course offerings	2.36	.97
	Academic credentials of faculty	2.38	1.01
	Choice of major	2.43	1.00
	Choice of electives	2.61	.97
	Total credits required	2.63	.99
	Size of university	2.64	1.06
	Student diversity	2.68	1.08
	Flexible tuition payments	2.69	1.14
	Faculty diversity	2.85	1.04
	University national rankings	2.91	.95
	Availability of financial aid	2.92	1.15
	Advertising in local market	2.98	.95
	Courses offered part online	3.16	1.06
	Having research focus in program	3.25	.88
	Transfer credit policies	3.54	.83

Note: Values are the mean of reported scores on a 4-point scale (strongly influenced = 1, no influence = 4)

Factor Analysis

Factor analysis, a technique used for identifying the relationships of groups of variables and their underlying structures (Field, 2005) and an essential tool in scale development (DeVellis, 2003), was considered appropriate for this study for two reasons. First, factor analysis explains variation among items and may reduce the number of items to a smaller number for further analysis while still representing the construct. Second,

factor analysis was used to discover underlying item groupings or dimensions that may not have been observed or anticipated initially (DeVellis, 2003).

DeVellis (2003) states that “In general, the factor pattern that emerges from a large-sample factor analysis will be more stable than that emerging from a smaller sample” (p. 137). Next, Field (2005) states that “Much has been written about the necessary sample size for factor analysis resulting in many rules of thumb” (p. 638). Finally, Field continues noting that three different groups of researchers, Kass and Tinsley, Tabachnick and Fidell, and Comrey and Lee, state that 300 participants is an adequate sample size.

Factor analysis for this study was conducted four ways: 1) all 62 items were loaded together, 2) items were loaded within each original construct, 3) items were loaded within each marketing P, and 4) items were loaded within individual student factors (ISF) and university student factors (UOF).

With this particular sample, the marketing P framework analysis showed the most cohesive and consistent factor groupings. This decision was based on the high factor loadings and Cronbach’s alphas. Cronbach’s alphas equal to or greater than .60 were acceptable because Field (2005) notes “...when dealing with psychological constructs, values below .70 can, realistically, be expected because of the diversity of the constructs being measured” (p. 668).

Eigenvalues represent the amount of information captured by a factor; these values were used to judge when enough factors were extracted. A guideline is factors with eigenvalues less than 1.0 should not be retained (DeVellis, 2003). For this study, eigenvalues greater than 1.0 were extracted using the Varimax method that simplifies the

interpretation of factors by minimizing the number of variables that have high loadings on each factor (Field, 2005). DeVellis (2003) states “In factor analysis, rotation achieves clarity by seeking factors that result in each item substantially loading on (i.e., correlating with) only one factor” (p.121). There are two types of rotation to choose from in factor analysis: orthogonal and oblique rotation. Orthogonal, the Varimax method, was selected because this study analyzed items believed to correlate with each other.

Factor analysis results for each of the six marketing Ps framework is presented next. All items on the survey were categorized into six major marketing P contexts: people, personal, place, price, product, promotion. Distinguishing among these six is relevant to inform marketing and admissions within enrollment management on what factors they may or may not influence decisions to enroll in graduate school.

People.

For the people items, four of the seven items related to the quality and diversity of faculty and the student body. Table 9 shows these four items are robust, with a Cronbach’s alpha of 0.750. Two of the other three items related to interaction, enrolled coworker and alumni, did have a strong factor loading to form a people subgroup, but reliability was weaker with Cronbach’s alpha at 0.418. Four items: 1) faculty credentials 2) faculty reputation 3) faculty diversity and 4) student diversity represent the newly formed marketing framework *people* and account for 42% of the variance.

Table 9
People Factor Analysis Results

Items	Factor loadings	
	1	2
	People	
Enrolled coworker		0.804
Faculty interaction		
Alumni interaction		0.726
Faculty credentials	0.678	
Faculty reputation	0.659	
Faculty diversity	0.826	
Student diversity	0.786	
% Variance	41.63	20.94
Cronbach's alpha	0.750	0.418

Personal.

The personal marketing P factor had 17 items related to personal reasons for pursuing an MBA degree, any personal concerns, and perceived academic ability. Six new factors shown in Table 10 were found as a result of factor analysis. Three of the six have strong to moderate Cronbach alphas thus creating three subcategories under the personal framework. The first newly formed subcategory, labeled *personal academic perception* has four items: 1) meeting minimum GPA, 2) meeting GMAT scores, 3)

meeting work experience requirements and 4) identifying two recommenders. These four items account for 18.66% of the variance and have a Cronbach's alpha of 0.751.

Factors four had the second highest viability in the personal marketing P group consisting of two items: 1) handling academic rigor, and 2) the ability to balance work and school. This newly formed subgroup labeled *personal performance* had a Cronbach's alpha of 0.60 and account for 8.1% of the variance.

The third viable factor had two items: 1) boss prompting, and 2) mentor prompting, to form a subgroup labeled *personal external prompting*. It had .68 Cronbach's alpha and account for 6.8% of the variance.

Table 10
Personal Factor Analysis Results

Items	Factor loadings					
	1 Academic Perception	2	3	4 Personal Performance	5 External Prompting	6
Increased knowledge			0.743			
Increased pay		0.667				
New skill set			0.673			
Boss prompting					0.856	
Mentor prompting					0.857	
Career change		0.555				0.440
Credibility		0.641				
Job loss						0.779
Love of learning			0.623			
Handling academic Rigor				0.830		
Reap benefits of MBA		0.577				
Balance work/school				0.744		
Pay or receive financial Aid						0.443
Meeting min GPA	0.735					
Meeting GMAT	0.659					
Meeting work experience	0.814					
Identify two recommenders	0.719					
	18.669	10.67	8.881	8.129	6.852	6.566
% Variance		7				
Cronbach's alpha	0.751	0.528	0.438	0.600	0.688	-----

Place.

Place is made up of two items with courses at my times and commuting distance, showing strong factor loadings (Table 11). Place is related to making education available and accessible to students. In spite of a weak Cronbach's alpha at 0.262, the factor loadings are robust. Commuting distance and courses offered at my times were the two

highest rated items under the original quality construct with a mean of 1.36 and 1.41, respectively. For this reason, these three items were retained for the marketing P place.

Table 11
Place Factor Analysis Results

Items	Factor loadings
	Place
Courses at my times	0.729
Online class offerings	0.520
Commuting distance	0.667
% Variance	41.57
Cronbach's alpha	0.262

Price.

Price is made up of three items in Table 12. Tuition and financial aid available for those who qualify are readily associated with price. Flexible tuition payments was included because it may afford a student the ability to spread out payments if needed. This is especially important if tuition reimbursement programs require the employee to prepay for courses or if a maximum reimbursement cap exists for the tuition dollar amount per year allowed by a company. All three items load highly and are included in the marketing P price. Cronbach's alpha indicates reliability at 0.726. This factor grouping remained unchanged and retained the original three items.

Table 12
Price Factor Analysis Results

Items	Factor loadings
	Price
Tuition	0.737
Financial aid availability	0.847
Flexible tuition payments	0.824
% Variance	64.616
Cronbach's alpha	0.726

Product.

Product consisted of 11 items in Table 13. Factor analysis resulted in three newly formed subgroups. The first subgroup was labeled *program attributes* and consists of six items with a Cronbach's alpha of 0.770 and accounts for 39.08% of the variance. The six items with factor loadings between 0.526 and 0.806 are 1) size of university, 2) choice of major, 3) choice of electives, 4) frequency of course offerings, 5) research focus, and 6) transfer credit. Three items 1) academic reputation, 2) university accreditation, and 3) programmatic accreditation form the next newly formed subgroup labeled *program quality*. *Program duration* is the third subgroup and consists of two items 1) total credits required, and 2) total length of the program.

Table 13
Product Factor Analysis Results

Items	Factor loadings		
	1 Program Attributes	2 Program Quality	3 Program Duration
Size of university	0.597		
Academic reputation		0.813	
University accreditation		0.873	
Programmatic accreditation		0.776	
Choice of major	0.701		
Choice of electives	0.806		
Frequency of course offerings	0.526		
Total credits required			0.829
Total length duration of program			0.843
Research focus	0.555		
Transfer credit	0.533		
% Variance	39.088	13.401	9.400
Cronbach's alpha	0.770	0.817	0.754

Promotion.

The promotion framework was made up of five items shown in Table 14 of which two relate to direct interaction with admissions staff, one is event related, and two were external promotion -- advertising and national rankings. Based on the factor loadings and

Cronbach's alpha of .66, two items: 1) speaking directly and 2) meeting in person with admissions staff were retained to form *direct interaction*.

Table 14
Promotion Factor Analysis Results

Item	Factor loadings	
	1 Direct Interaction	2
Speaking directly with admissions	0.807	
Meeting in person with admissions	0.872	
Visiting the university at an event	0.429	0.408
Advertising		0.809
National rankings		0.819
% Variance	32.36	20.95
Cronbach's alpha	0.667	0.584

In summary, factor analysis of the original 6 marketing P framework with 62 original survey items were reduced to 31 items. The marketing P framework was redesigned on the factor analysis results. The only original marketing P that remained unchanged and maintained its three original items was price. Figure 1 shows the newly formed marketing P framework and the corresponding items. Two marketing Ps, product and program, each had three newly formed subgroups. Promotion has one group.

The personal marketing P is the only P with the designation of Individual Student Factors (ISFs). The other five marketing Ps -- people, place, promotion, price, and product -- are designated as University Organizational Factors (UOFs). The ISF and UOF

designation is adapted from the Hossler and Gallagher model (1987) because some factors only the university can control and some factors the student controls.

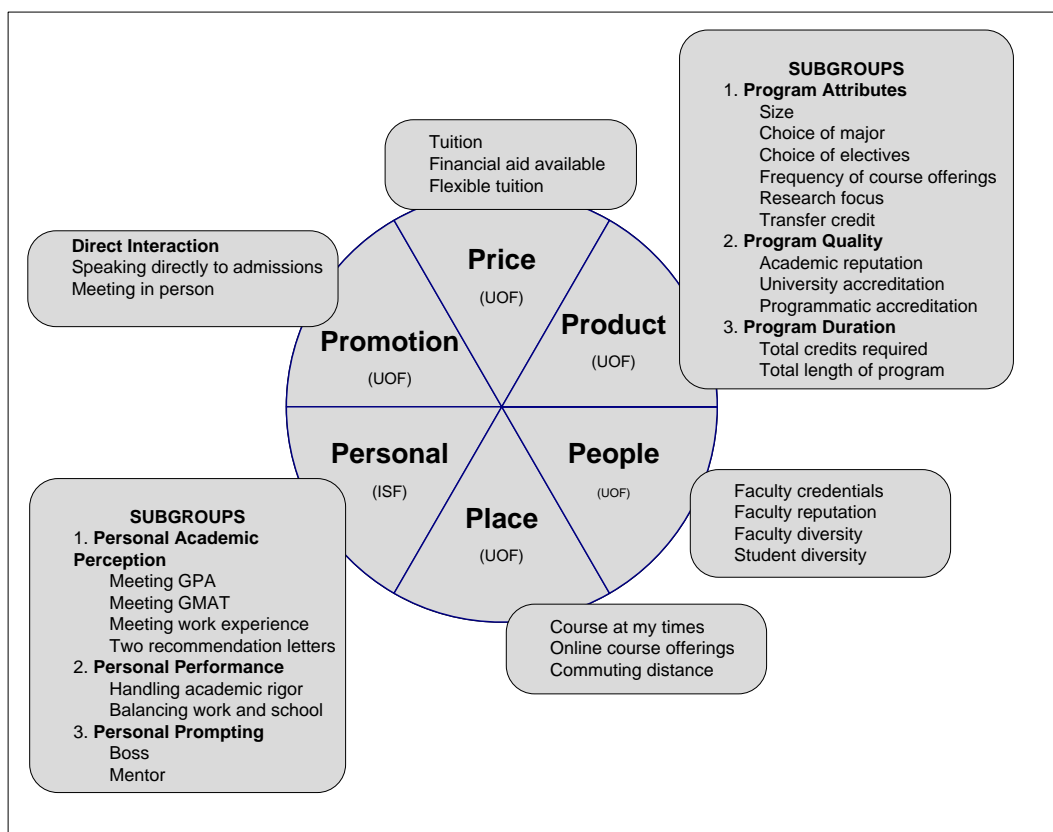


Figure 1. Newly Formed Marketing Ps and Corresponding Items

Essential Website Items (RQ #2)

What items on the private university's website are essential to graduate students?

Respondents were asked to indicate if each of 13 website items would be essential to them when seeking information to enroll. Response choices were yes – essential or no – not essential. Thirteen items were evaluated and reported in Table 15. The top web items with 95% or more of the respondents indicating essential were: 1) list of programs offered (98.5%), 2) admissions requirements (97.1%), and 3) tuition costs and fees (95.3%). The three most frequently indicated as no or not essential were: 1) profiles of current students (53.4%), 2) alumni profiles (52.8%), and 3) news and events in field of

interest (44.9%). The spread from 87% to 65% included financial aid information (77.1%), assistance with admissions application (72.4%), graduation rates (65.4%), and student testimonials (64.5%).

Table 15
Essential Web Items Rank Ordered by Frequency of Yes- Essential (N = 341)

Rank	Information on Website	Yes -Essential		No- Not Essential	
		%	N	%	N
1	List of programs offered	98.5	336	1.5	5
2	Admissions requirements	97.1	331	2.9	10
3	Tuition costs and fees	95.3	325	4.7	16
4	Catalog	86.8	296	13.2	45
5	Faculty profiles	82.4	281	17.6	60
6	Financial aid information	77.1	263	22.9	78
7	Assistance with admission Application	72.4	247	27.6	94
8	Scholarships	66.3	226	33.7	115
9	Graduation rates	65.4	223	34.6	118
10	Student testimonials	64.5	220	35.5	121
11	Profile of current students	53.4	182	46.6	159
12	Alumni profiles	52.8	180	47.2	161
13	News and events in field of interest	44.9	153	55.1	188

Thirty- nine students responded to the open-ended survey question of other essential web site items not listed. Results in Table 16 show locations and schedules as the two items with the highest frequency of responses. Competitive information about

other schools and local rankings are the next two frequent items as essential on the website. The other items listed were grouped in broad categories from alumni and networking opportunities to admissions contact information.

Table 16

Other Website Items Rank Ordered By Number of Responses

Other Essential Website Items	Number of Responses
Location	6
Schedules	4
Competitive information about other schools	3
Local rankings	3
Alumni and networking opportunities	3
Events and activities	3
University mission, goals, program philosophy	3
Faculty information and student teacher ratio	3
Discounts, video access, student concerns	3
Average time commitment	2
Grade reports	2
Program flexibility	2
Contact information for admissions	2
Total	39

Additional Universities Inquired, Applied or Enrolled (RQ #3)

Counting the private university as one, how many other total universities did the enrolled MBA student inquire at or apply to?

Respondents were asked three questions: 1) How long before applying did they begin their search for a graduate school? 2) Counting your current school as one, to how many other total universities did you apply? 3) Counting your current school as one, to how many additional universities did you inquire and interact with via phone, email or web chat? These questions were asked to get a sense of the length of search and comparative shopping of students prior to their decision to enroll.

Slightly more than three-fifths of the students spent less than six months searching with the largest percentage of students (32.1%) spending zero to three months searching

followed by 29.4% who spent four to six months before applying (see Table 17).

Seventy-four percent of students applied only to the private university (see Table 18).

Enrolled students who had inquired and interacted with at least one additional university were 20.9%, two additional universities were 25.7% and three additional universities were 26.5%.

Table 17
Months Spent Searching Before Applying(N=340)

Months	Number	%
0-3	109	32.1
4-6	100	29.4
7-12	65	19.1
13-18	28	8.2
19+	38	11.2
Total	340	100

Table 18
Other Universities Applied to/Inquired At

Total universities applied to in addition to current enrolled university	N	%
1	253	74.4
2	64	18.8
3	21	6.2
4	2	0.6
Did not state	1	
Total universities inquired at in addition to current enrolled university		
1	71	20.9
2	87	25.7
3	90	26.5
4	55	16.2
5	24	7.1
6 or more	12	3.6
Did not state	2	
Total	339	100

Parents' Education (RQ # 4)

Is there a difference in parents' education as an influence on factors that influenced the enrollment decision? Using parents' education, three groups were identified: 1) neither parent had a degree, 2) one parent had a degree, or 3) both parents had a degree at each the bachelors and masters level. Hypothesis: There is no difference among the three groups of parent education in influential factors.

The most frequent level of education identified by the graduate students for their parents was neither parent had a bachelor's or a master's degree. Forty-nine percent of respondents had both parents who did not have a bachelor's degree and 73.2% of respondents had both parents who did not have a master's degree (Table 19).

Table 19
Respondents' Parent Education

Parent(s) with degree	Bachelor's		Master's	
	N	%	N	%
Neither parent	167	49.1	249	73.2
One parent	78	22.9	66	19.4
Both parents	95	27.9	25	7.4
Did not state	1		1	

Analysis of Variance

ANOVAs were performed on the newly formed marketing P frameworks to answer research questions four and five. ANOVA assumptions were level of measurement of the dependent variable was ratio, observations are independent, and there is a normal distribution of scores for the dependent variable and homogeneity of variance

(Field, 2005; Gilner & Morgan, 2000). Homogeneity of variance was assessed through the Levene test at an $\alpha = .05$.

A one-way ANOVA was calculated on the participants' parents' bachelor's degree level of education and each marketing P (Table 21). All the marketing Ps were converted to Z-scores to account for possible violations of the homogeneity of variance assumption (Field, 2005). The results are presented first for parents' bachelor education followed by ANOVA results for parents with master's degree level of education on page 81.

The ANOVA analysis for all the marketing Ps, with the exception of the product attributes subgroup, showed no significant differences by parents' level of bachelor's education for the influential enrollment factors. The marketing P for product consists of three subgroups: 1) program attributes, 2) program quality, and 3) program duration. The analysis for product program attributes (Table 20) indicates a significant influence of parent education on enrollment factors, $F(2, 337) = 6.635, p = .001$.

Post hoc tests were conducted for the subgroup program attributes because there is no specific hypothesis (Field, 2005) about the influence that parents' education has on the program attributes. Levene's test showed a significance level at .090 which indicates that the variances of the group are not different. Program attribute post hoc tests (Table 22) revealed that there was a difference in influential enrollment factors between the group neither parent obtained a bachelor's degree and the group one parent obtained a bachelor's degree. In other words, program attribute scores are different when parents are grouped by level of education. Both parents with bachelor degrees were similar to the one parent bachelor degree group. Since student responses are different on influential enrolled

factors, it would suggest that knowing the educational attainment level of parent education might be helpful to marketing.

Table 20

Analysis of Variance of all Marketing Ps by Parents' Bachelor's Education

	Source	Df	SS	MS	F	p
People	Between groups	2	4.95	2.47	2.52	.082
	Within subjects	337	330.70	.98		
	Total	339	335.66			
Personal Academic Perception	Between groups	2	2.64	1.32	1.32	.026
	Within subjects	337	335.52	.99		
	Total	339	338.16			
Personal Performance	Between groups	2	2.26	1.13	1.14	.318
	Within subjects	337	332.63	.98		
	Total	339	334.90			
External Prompting	Between groups	2	.04	.02	.02	.977
	Within subjects	337	339.22	1.00		
	Total	339	339.26			
Place	Between groups	2	1.56	.781	.78	.459
	Within subjects	337	336.74	.999		
	Total	339	338.30			
Price	Between groups	2	.41	.20	.20	.812
	Within subjects	337	337.02	1.00		
	Total	339	337.44			
Program Attributes	Between groups	2	12.75	6.37	6.63	.001 **
	Within subjects	337	323.88	.96		
	Total	339	336.64			
Program Quality	Between groups	2	2.41	1.20	1.23	.291
	Within subjects	337	328.66	.97		
	Total	339	331.08			
Program Duration	Between groups	2	3.73	1.86	1.89	.152
	Within subjects	337	332.67	.98		
	Total	339	336.41			
Promotion Dir Interaction	Between groups	2	1.38	.69	.694	.500
	Within subjects	337	335.89	1.00		
	Total	339	337.28			

** $p < .01$.

Table 21
Program Attributes Post Hoc Results

By Parent Bachelor Education

						95% Confidence Interval	
		(I) Parents BA	(J) Parents BA	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound Upper Bound
Tukey HSD	1	2		-.323*	.134	.044	-.639 -.006
			3	-.427*	.125	.002	-.723 -.130
	2	1					.006 .639
			3	-.103	.149	.768	-.456 .249
	3	1					.130 .723
			2				-.249 .456

* The mean difference is significant at the 0.05 level.

The ANOVA analysis for each marketing P framework was not significant. There was no significant differences by parents' level of master's education for the influential enrollment factors (Appendix B).

Generational Level (RQ #5)

Is there a difference in enrolled students' generation as an influence on factors that influenced the enrollment decision? Using students' self-identified generational level, three groups were identified: 1) Boomer – born 1943-1960, 2) Generation X – born 1961-1981 or 3) Millennials – born 1982-2002. Hypothesis: There is no difference among the enrolled students' generational level in influential factors.

t-Tests

Table 22 shows the breakdown by generation with Generation X being the largest group at 82.6% (n = 256). There are 52 (16.8%) Baby Boomers and two (.6%) Millennials. Independent t tests were performed on the newly formed marketing frameworks with the generation groups Boomer and Generation Xers; the Millennial

population was small with two students. Assumptions were that observations are independent, there is a normal distribution of scores was normal for the dependent variable and homogeneity of variance, and sample sizes are unequal (Field, 2005; Gilner & Morgan, 2000). Homogeneity of variance was assessed through the Levene test at an $\alpha = .05$

The analysis for each marketing P and generation showed there was no significant difference by generation on the influential enrollment factors (see Appendix C). Levene's test showed non-significance for each marketing P at levels indicating that the variance of the groups are not different.

Table 22
Generation Student Identified

Generation	N	%
Boomer 1943-1960	52	16.8
Gen X 1961-1981	256	82.6
Gen Y 1982-2002	2	.6
Did not state their age	31	
Total	310	100

Marketing P Comparison (RQ # 6)

Which marketing P had the strongest influence on the ultimate decision of enrolled MBA students?

Of the six marketing Ps, Table 23 shows the product subgroup of program quality with the lowest mean score (1.85) suggesting the strongest influence on the enrollment decision of respondents. This was followed closely by the personal performance subgroup and place with respective group means of 1.93 and 1.97. These small difference could have resulted because of error.

Table 23
Newly formed P Factors
Rank Ordered By Strongly Influenced Enrollment Decision (N = 341)

Marketing P	ISF or UOF	Mean	SD
Program Quality (Product subgroup)	UOF	1.85	.717
Personal Performance (Personal subgroup)	ISF	1.93	.695
Place	UOF	1.97	.530
Program Duration (Product subgroup)	UOF	2.37	.862
Promotion - Direct Interaction	UOF	2.39	.846
People	UOF	2.40	.764
Price	UOF	2.58	.866
Program Attributes (Product subgroup)	UOF	2.80	.652
Personal Academic Perception (Personal subgroup)	ISF	2.88	.827
External Prompting (Personal subgroup)	ISF	3.25	.872

Note: Values are the mean of reported scores on a 4-point scale (strongly influenced = 1, no influence = 4)

This concludes the findings for each of the six research questions. Factor analysis showed that the marketing P framework was the most cohesive and consistent use of item

groupings. The EMPP's sixty-two items were reduced to 31 as a result of factor analysis. Each marketing P had a designation of ISF, Individual Student Factor or UOF, University Organizational Factor. This designation is important in interpreting the findings in Chapter Five.

CHAPTER 5: CONCLUSION

This chapter presents a summary of the study findings and important conclusions drawn from the data. The chapter is divided into seven sections. The chapter begins with an Overview of the Problem and Review of Methodology. The third section restates each research question with the findings and discussion for each question. Section four through six are Limitations, Conclusions, and Implications for Action. The chapter concludes with Recommendations for Research.

Overview of the Problem

Colleges and universities use marketing and admissions intelligence to inform their enrollment management strategies. Enrollment management, a systematic process in higher education to improve recruitment and retention, has been largely focused on undergraduate students and the factors that influence their college choice. There is comparatively little research on graduate students and their decision process to attend graduate school. Therefore, a research gap exists for universities trying to improve recruitment and retention of graduate students. This is even more significant than in the past due to the changing profile of graduate students who are multi-generational and do not select graduate schools for the same reasons as undergraduate students select colleges or universities.

The purpose of this study was to study the factors that influenced graduate students to enroll in an MBA program at a private university and expand the research in graduate school enrollment management. Marketing and admissions departments are

uninformed about strategies and processes to serve the diverse needs of multigenerational students.

Review of the Methodology

Quantitative research methodology was used to identify factors that may or may not influence the enrollment decisions of current enrolled business graduate students. The Education Marketing P Prism (EMPP), an electronically administered 62 Likert item instrument, was designed to look at two areas of enrollment management, marketing and admissions, as they relate to new student recruitment. Each item was mapped to a construct, a marketing P, and designated an Individual Student Factor (ISF) or a University Organizational Factor (UOF). These mapped designations are important when applying findings to improve marketing and enrollment management strategies. The marketing P framework is modeled after the traditional 4P marketing mix with two added Ps, people and personal. The ISF and UOF designations are adapted from the Hossler and Gallagher model (1987) because a university can control some factors and students control others.

Summary of Major Findings

Factor analysis of all 62 items loaded into the marketing P framework showed the most cohesive and consistent item groupings reducing items to 31. The only marketing P to remained unchanged and retain the original items was price. As a result of factor analysis, two original marketing Ps, product and program, each had three subgroups shown in Figure 2. The personal marketing P was the only P with the designation ISF. The other five marketing Ps -- people, place, promotion, price and product-- are designated as UOFs.

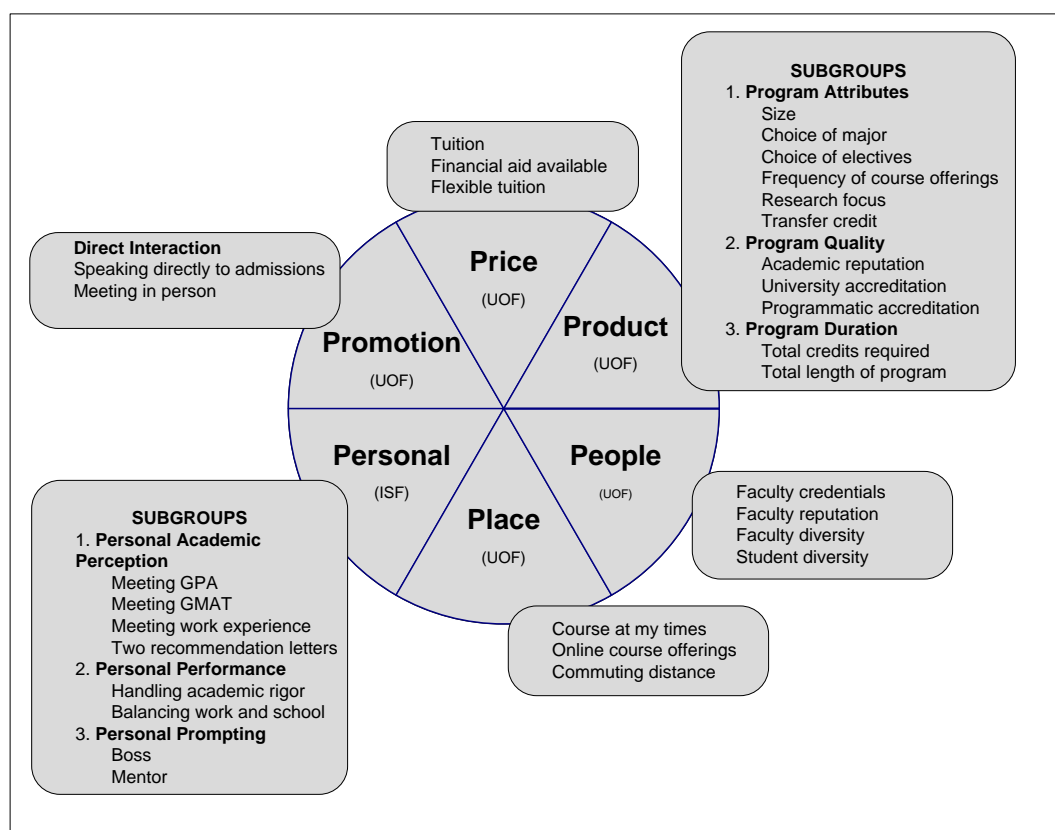


Figure 2. Newly Formed Marketing Ps and Corresponding Items

Findings and Discussions

Factors Influencing Enrollment (RQ #1)

Which factors, including interaction, academic ability, concerns, reasons to pursue a degree, and perceived quality influence the enrollment decisions of graduate business students at a private university?

As a result of factor analysis, the items identified were grouped into six marketing P frameworks. As Ivy and Naude (2004) note, it is important to determine which items of the marketing P mix are most important to a target audience. Using the P marketing framework, findings show that ability to balance work and school (Mean = 1.72), which falls into the Personal Performance was perceived to strongly influence students'

enrollment decisions. Meeting in person with admissions (Mean = 2.01), the next strongest influential factor, falls into the promotion marketing P mix.

Ultimately, many different things may influence the personal decision to enroll in a master of business administration (MBA) program. Personal factors are complex for graduate education. Five research studies had varying findings as to the factors that influenced graduate school choice. Srivastava (2008) wrote reputation was the top factor in selecting an executive MBA program. Earlier, Punj and Staelin (1978) found that cost, quality, and distance from school to home were important factors in MBA college choice, once an applicant was accepted. Maleney (1987) found that the most important factor in choosing to attend graduate school was the desire to learn and the most important factor for choosing a particular institution was related to the academic department was reputation. Personal goals and desires, followed by location, were the top two factors that influenced technology and master's and doctoral education teachers to enroll in master's level graduate programs (Cardon & Rogers, 2002). Anderson and Swazey (1998) found that over 75% of respondents stated that desire for knowledge in the field was important to their decisions to attend graduate school for doctoral study. Whether or not findings vary cannot be delineated due to study of different factors or factors that may not have been studied at all.

The ability to balance work and school strongly influenced students' enrollment decisions for this particular sample. The second most influential item was meeting with admissions. Other student choice graduate studies found different factors influencing the decision to apply and enroll in graduate school. Previous factors identified as influencing

graduate choice, combined with findings in this study, suggest that universities must discover which factors are key influencers for their particular student populations.

The central task in marketing graduate study education is understanding what the customer wants, examining what the university provides, understanding how the university is externally perceived, and determining how it can adapt to better satisfy what the customer wants (Kirp, 2003). What is extremely relevant, once that information is determined and recognizing that it is a moving target, is having a process or methodology of how to apply findings from research is to help universities interpret and integrate new information informing their enrollment management strategies. Even though factors that influence undergraduate students are not the same for graduate students, Hossler's belief about combined choice undergraduate student models can help in understanding one aspect of discovering and applying findings to enrollment management strategies (1987).

Undergraduate combined choice models using econometric, sociological, or information processing, have more explanatory power than either model alone because the strategist can focus on or combine variables from all three domains (Hamrick & Hossler, 1996). Hossler believes that valuable insights from students' perspectives, along with individual and organizational factors, interact to influence college choice (Hossler & Gallagher, 1987). Hossler's point is even though colleges ultimately choose students to admit to their programs, prospective students are influenced by various factors and making choices before they formally begin the application process. Because students control some factors and the university controls some factors, a university must attempt to see the factors influencing student choice – from the students' perspectives – in order to influence students' decisions. The EMPP instrument helps universities to both see the

factors from the students' perspective and frames whether students or the university controls them.

In this study, the two items perceived to be of greatest influence on students' enrollment decisions fall into an ISF and a UOF. Classified as an ISF, individual student factor, the number one influential factor to enrolled graduate students was the ability to balance work and school, in the personal marketing P. How students' perceive their ability to balance work and school cannot be controlled by universities. Knowing this information, allows universities to understand this concern from the students' perspective. While universities do not have direct control over this factor, they could review their communications to prospective students. What does their communication imply about academic load, work, school, and family balance? "Does this communication accurately reflect the reality of enrolled graduate students"? The university could help prospective students accurately assess their ability to balance personal and work obligations along with school. May a time management seminar mitigate this concern? Improved communication and training could be useful both in the recruitment and in the retention of enrolled students.

While the entire personal marketing P mix is an ISF, the second highest influential item on enrolled graduate students was meeting in person with admissions, a UOF in the promotion P marketing mix category. This supports one of Black's universal enrollment management principles (Henderson, 2001) that students are influenced by relationships. The university can evaluate the interaction, frequency, and effectiveness of prospective students meeting with admissions staff. For instance, how frequently are meetings taking place? What percentage of prospective students who have inquired meet

with an admissions representative? Critically important is the quality of prospective student meetings. Is the university investing in the professional development and retention of this influential university position? Responses and actions to these questions are completely within control of the university.

In addition to the ISF and UOF designations, the marketing P mix helps to understand where to apply findings to enrollment management strategies. The marketing P mix analysis for this study was adapted and modified from the Ivy and Naude (2004) study. Similar to the other graduate choice studies previously mentioned, findings for this study did not match any found in the Ivy and Naude (2004) study. The specific findings and the differences between the two studies are discussed in research question six.

In summary, other studies on graduate student choice showed different factors influenced students' decisions to apply and enroll in graduate school. As mentioned previously, some of the difference is related to consistency of factors studied. Many different things may influence the personal decision to attend an MBA program and personal factors are complex making it difficult for marketing to target specific characteristics. The first step is for universities to discover which factors are key influencers for their targeted student population. Second, universities can then use the ISF, UOF, and marketing P framework to inform their enrollment management strategies.

Essential Website Items (RQ #2)

What items on the private university's web site are essential to graduate students?

Of the 13 items evaluated, the most frequently identified items on the university website essential to graduate students are: 1) a list of programs offered 2) admissions requirements, 3) tuition costs and fees, 4) catalog, and 5) faculty profiles.

Internet marketing has resulted in fewer prospects directly contacting a university. Universities must understand prospective students' search and exploration of information from institutions they are interested in attending. The Merante, Huddleston and Drexel (2006) study showed that over 80% of school research is done on the web and the top five valued web content for MBA students were admissions requirement, academic programs, online applications and scholarships (tied), and financial aid information. These findings are similar to this study for two of the top five items, list of programs and admissions requirements. The university catalog and faculty profiles ranked in the top five as important to students. Faculty profiles could be perceived under the marketing P people where faculty credentials, reputation, and diversity are influential factors for that framework. The university catalog could be perceived as a subset of academic programs resulting in three of five items being similar to the findings in the Merante, Huddleston and Drexel (2006) study of search done on the web. The two open question responses listed as essential website items by enrolled students were location and schedules. These were not similar to the Merante, Huddleston and Drexel study. Because the private university in this study has three locations and where those locations are or which classes are held at each location may not be clear. The study university may want to ensure locations and schedules are available to students prior to enrollment.

Additional Universities Inquired, Applied or Enrolled (RQ #3)

Counting the private university, to how many additional universities did the enrolled student inquire at and or apply?

The largest percentage of students (32.1%) spent zero to three months searching followed by 29.4% who spent four to six months searching before applying. Enrolled

students who had inquired and interacted with at least one additional university were 20.9%, two additional universities were 25.7% and three additional universities were 26.5%. Three quarters (74.4%) of students applied only to the private university followed by 18.8% applying to one other university.

3a) How long before applying did they begin their search for a graduate school?

This question speaks to the search stage in the Hossler and Gallagher undergraduate model described as the most important stage. The search stage is the most open to intervention or influences because the student is making a list of potential colleges and evaluating and refining the list (Hossler & Gallagher, 1987). In the model, the time frame that undergraduate students are actively involved in learning and gathering information about colleges is late junior year through early senior year, approximately eight months. For graduate students in this study, a shorter time frame for the search stage was less than six months. These findings are six months shorter than those in the Merante, Huddleston, and Drexel (2006) study where MBA students began their active search more than one year in advance of applying.

Findings show that 73.1% of respondents inquired at up to three additional universities during their search. Comparative shopping for this particular population was limited to a maximum of three additional universities. This is valuable information for university marketing and admissions as they conduct competitive analysis studies. It is possible for instance, that fewer competitors exist than expected.

Evaluation and refinement of the inquired list resulted in 74.4% of respondents applying only to the private university and 18.8% applying to at least one other university. In conjunction with the finding that over 60% of respondents spent less than

six months in the search stages suggest that the zero to six month period following an initial inquiry to the university was the most critical time to influence an enrollment decision.

Parent Education (RQ #4)

Is there a difference in parents' education as an influence on factors for enrolled graduate students? Using parents' education, three groups were identified: 1) neither parent has a degree, 2) one parent has a degree, or 3) both parents have a degree at each the bachelors and at the masters level. Hypothesis: There is no difference among the three groups of parent education on influential factors.

At the master's level, findings showed that there was no difference in the influential factors by parent group. There was a difference in the influential enrollment factors by the bachelor's level parent group.

Using parents' education, the three groups for masters and bachelors level were 1) neither parent has a degree, 2) one parent has a degree or 3) both parents had a degree. Forty-nine percent of respondents had both parents who did not a bachelor's degree and 73.2% of respondent had both parents who did not have a masters degree. The ANOVA analysis for all the marketing Ps, with the exception of the product attributes subgroups, showed no significant differences by parents' level of bachelor's education for the influential enrollment factors. The product program attribute subgroup consists of six items: 1) size, 2) choice of major, 3) choice of electives, 4) frequency of course offerings, 5) research focus, and 6) transfer credit. Program attribute post hoc tests revealed that program attribute scores are different when parents are grouped by level of education. Both parents with bachelor degrees were similar to the group where one parent had a

bachelor degree. Marketing and admissions may benefit knowing the level of both parents education because it suggests a difference at the bachelor's level. There was no significant difference by parents' level of master's education for the influential enrollment factors.

Generational Level (RQ #5)

Is there a difference in enrolled students' generational level as an influence on factors for enrolled graduate students? Using students' self-identified age, three groups were identified: 1) Boomer – born 1943-1960, 2) Generation X – born 1961-1981, or 3) Millennials – born 1982-2002. Hypothesis: There is no difference among the enrolled students generational level in influential factors.

Generation X was the largest group of respondents at 82.6% followed by Baby Boomers at 16.8% and 0.6% of Millennials. The analysis for marketing Ps by generation type showed no significant differences for marketing Ps on the influential enrollment factors.

It was surprising to see no differences in influential enrollment factors between the Boomer and Generation Xers because each generation does have different values, experiences, styles, and attitudes which shape their decisions about education and career choices. Perhaps these population groups are more homogeneous and the 'differences' proclaimed are highly generalized. Millennials were not included in this analysis because there were only two students in that generation.

If Millennials are included in future studies, there may be a difference among enrolled students' generational level and influential factors. Graduate schools can expect their graduate Millennial population begin to grow in 2010 assuming the Millennial

population waits four to five years after their undergraduate degree to enroll and assuming they complete their bachelor's degree in four years. In a longitudinal study of graduate students by the U.S. Department of Education (2007), on average, students entering MBA programs typically waited four years after completing their undergraduate degrees to enroll. This information, combined with the fact 80% of school research is done on the web (Merante, Huddleton, & Drexel, 2006), clearly supports that the profile of graduate students is multigenerational and the number of Millennial student will be increasing. Marketing can target Millennials with e-marketing campaigns because Millennials have an increased interest of going to college (Howe & Strauss, 2002) and it is reasonable to assume this interest would translate to graduate school interest as one of the Millennial work perspective characteristics is ongoing learning.

Marketing P Comparison (RQ #6)

Which marketing context had the strongest influence on the ultimate decision of enrolled MBA students?

Of the six marketing Ps, the product subgroup of program quality had the strongest influence on the enrollment decision of respondents. The personal performance subgroup was second, followed closely by place. The small differences between these two marketing Ps could have resulted because of error.

The four Ps of marketing, product, price, place and promotion, are a traditional integrated marketing strategy used to create, communicate, and deliver value for consumers. In the Ivy and Naude (2004) study, researchers based their study on graduate choice using the traditional 4P framework adding a fifth P people. Results for the Ivy and Naude study showed a sixth and seventh Ps, which they labeled premium and

prominence. In this study, the two marketing Ps that were added to the traditional framework were people and personal. Unlike the Ivy and Naude (2004) study, findings for this study showed that items in the marketing P product subgroup labeled program quality had the strongest influence. Items within this subgroup included academic reputation, university accreditation, and programmatic accreditation. These are classified as UOFs, which can be directly controlled by the university.

The next marketing P, personal performance, showed the second strongest perceived influence on the enrollment decision of respondents. Handling academic rigor and balancing school and work are the two items that make up personal performance. These two items are classified as ISFs. Place, a marketing P made up of three items: 1) course at my times, 2) online course offerings, and 3) community distance, was the third strongest P influencing the enrollment decision of respondents. The items and marketing Ps which influenced students in the Ivy and Naude (2004) study were completely different from this study. This may seem surprising given that the marketing P mix of this study was modeled after the Ivy and Naude study. However, what is more evident, based on this research, is that the main objective of marketing in education is to understand what uniquely influences the enrollment decision for a university so a university can know what uniquely influences the enrollment decision for a target population.

The Ivy and Naude (2004) study showed range of electives and choice of major, part of the marketing P program mix, were the most important factors rated by students in the selection of an MBA program. Choice of electives and choice of major, found in the program attributes, a subgroup of the marketing P product, were ranked eighth and third from the bottom for this study. The study university does offer electives in the program.

Price was next in the Ivy and Naude study and ranked seventh and fourth from the bottom in this study. Perhaps the reason price was ranked low in this study was because 85.6% of respondents had some type of company tuition reimbursement.

Limitations

This study is limited in a number of ways. First, the focus was on enrolled graduate MBA students and did not include data from students who chose not to enroll at the study university. This is a limitation because perhaps there are undiscovered factors influencing decisions for students who did not enroll. Second, as this is one private institution study, the findings may not be comparable or applicable to public universities or other private universities. Third, the study university offers one graduate MBA program so findings may not be comparable to other graduate programs.

Conclusions

Given the limited financial resources and the tremendous pressure for higher education institutions to find new more effective ways to attract and retain students, knowing what influences the enrollment decision of today's graduate students are critical. Using college choice behavior as a strategy for enrollment management to attract and retain business graduates today is even more important to colleges and universities. In a New York Times article (Lohr, 2009), undergraduate students are considering other career paths than business and finance; though many MBA programs target non-business undergraduate students, this trend could have a negative impact on future MBA enrollment. This study provided a quantitative model to assist institutions in informing their marketing and admissions enrollment management strategies to offset the possible declines in MBA graduate enrollments.

The Education Marketing P Prism (EMPP) instrument emerged as a tool for higher education institutions to inform their marketing and admissions enrollment management. Like the Hossler and Gallagher model, the EMPP instrument emphasizes the student rather than the institution. Using the EMPP instrument, the six marketing Ps represent the students' perceptions on what influenced their enrollment decisions. As findings of influential choice factors for the studied university sample were different from previous results suggests that universities can work from an initial P structure, but will likely have a different set of items or marketing Ps that influence the enrollment decision of their particular target population. For the EMPP instrument to be useful, universities must determine which elements of the marketing P mix are most important to their target audience. The study institution should also explore or increase the use of market segmentation in its enrollment management strategies and the use of social media. Segmentation of the target audience by generation or parent education needs further exploration and may produce a different response to marketing communications. Social media may include social networking, such as Facebook, blogs, and wikis. According to a study, (Kattner, 2009), 85% of 500 four year accredited higher education institutions are using at least one form of social media. This study does add to graduate enrollment management research by providing an instrument and framework to inform marketing and admissions.

Implications for Action

Colleges and universities are marketing and producing educational programs as their products. The four marketing Ps have traditionally represented the sellers' view of marketing tools available to influence the buyer (Kotler & Keller, 2006). Using a

modified marketing P framework, this research study informs graduate marketing and enrollment management from the students' point of view. By finding which items in any given marketing P more strongly influence students, a university can create a custom marketing P mix template on which to imprint their enrollment management strategies. For instance, multiple subjective opinions are offered to marketing regularly by various university constituents on how to better market programs. It becomes difficult to distill which paths are going to have the most significant return on investment. The marketing P template provides a map and data to make informed decisions.

Recommendations for Research

Using the collected data, differences in the influence of work/life balance between men and women could be explored. Parent education as an influence could be further investigated to see if education became an influence if controlled for student age.

The study could be duplicated using the EMPP instrument to see how influential enrollment factors vary and how the marketing P framework would change using other universities and different samples. As the millennial population increases, studying this group and the factors that influence their graduate enrollment decisions would inform and benefit enrollment management. Research could investigate if work/life balance is a strong influence on enrollment decisions at other universities and for Millennials. The millennial segment of graduate students will continue to increase for universities so preparing and planning for that increase will enable universities to meet their enrollment management challenges. In a longitudinal study of graduate students by the U.S. Department of Education (2007), researchers studied found that on average, students entering MBA programs typically waited four years after completing their undergraduate

degree to enroll in graduate school. Based on that data, we could expect beginning about 2015, Millennials could become the majority population in masters graduate programs.

The EMPP instrument could be modified two additional ways. The first would be to ask enrolled students which other universities they applied to providing specific competitive data for marketing and admissions. The second instrument modification should be related to web site functionality and personalization. Items such as current student profiles, student testimonials, alumni profiles, and news and events in field of interest could be omitted from the modified EMPP. In addition, according to Nichols and Suda (2001) another marketing P, presentation, should be considered in the traditional marketing mix for internet e-marketing strategies. Presentation includes website navigation and the functionality of a website. Presentation data would be useful in the marketing P framework in creating and informing a successful e-marketing strategy. Understanding the process of how students search for information may be useful data for e-marketing strategies and information technology departments. Universities may see the internet as a marketing tool and should recognize prospective students see the internet as an information tool.

References

- Anderson, M.S. & Swazey, J.P. (1998). Reflections on the graduate student experience: An overview. *New Directions for Higher Education*, (101), 3-13.
- Barker, S., Felstehausen, G., Couch, S., & Henry, J. (1997). Orientation programs for older and delayed-entry graduate students. *NAPSA Journal*, 35, 57-68.
- Browning, M. C. (2000). Graduate Student Enrollment Management: Toward a model that predicts student enrollment. *Dissertation Abstracts International*, (UMI No. 3054852).
- Cardon, P.L. & Rogers, G.E. (2002). *Technology education graduate education: Factors influencing participation*. Columbus, OH: International Technology Education Association Conference. (ERIC Document Reproduction Service No. ED462615).
- Chester, E. (2008). *Eric Chester & generation why*. Retrieved electronically March 19, 2008 from www.generationwhy.com.
- Choy, S. P. & Cataldi, E.F. (2006). *Student financing of graduate and first-professional education, 2003-04* (NCES 2006-185). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Compton, J.I., Cox, E., & Laanan, F.S. (2006, Summer). Adult learners in transition. *New Directions for Student Services*, (114), 73-79.
- Coomes, M.C., (2000, Spring). The historical roots of enrollment management. *New Directions for Student Services*, (89), 5-18.
- DesJardins, S. (2002). An analytic strategy to assist institutional recruitment and marketing efforts. *Research in Higher Education* 43, (5), 531-553.
- DeVellis, R.F. (2003). *Scale development theory and applications* (2nd). Thousand Oaks, CA: Sage Publications.
- Field, A. (2005). *Discovering statistics using SPSS* (2nd Ed.). Thousand Oaks, CA: Sage Publications.
- Fink, A. (2006). *The Survey Handbook*. Thousand Oaks, CA: Sage Publications, Inc.
- Gilner, J. & Morgan, G. (2000). *Research methods in applied settings*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

- Goenner, C.F. & Pauls, K. (2005). A predictive model of inquiry to enrollment. *Research in Higher Education*, 47, (8), 935-956.
- Hamrick, F. A. & Hossler, D. (1996). Diverse information-gathering methods in the postsecondary decision-making process. *The Review of Higher Education*, 19, (2), 179-198.
- Henderson, S.E. (2001). On the brink of a profession: A history of enrollment management in higher education. In J. Black (Ed.), *Strategic enrollment management revolution* (pp. 1-36). Washington, DC: American Association of Collegiate Registrars and Admissions Officers.
- Hilston, J. (2006, April 24). Reasons influencing college choice in U.S. *Pittsburgh Post Gazette*, p. A1.
- Hossler, D. (1998). In college admission: Strategic choices. *The Journal of College Admission*, 162, 13-19.
- Hossler, D. (1999). Effective admissions recruitment. *New Directions for Higher Education*, (108), 15-30.
- Hossler, D. (2004, April 30). How enrollment management has transformed—or ruined—higher education. *The Chronicle of Higher Education*, 50, 34, p. 3.
- Hossler, D. & Gallagher, K.S. (1987). Studying student college choice: a three-phase model and the implications for policymakers. *College and University*, 62, 207-221.
- Hossler, D. & Maple, S. (1993). Being undecided about postsecondary education. *The Review of Higher Education*, 16, 3, 285-307.
- Hossler, D., Schmit, J. & Vesper, N. (1999). *Going to college: How social, economic and educational factors influence the decisions students make*. Baltimore: The John Hopkins University Press.
- Howe, N. & Strauss, W. (2002). Coming soon to a graduate school near you: The millennial generation. *Selections*, Spring, p. 40.
- Huddleston, T. Jr. (2000). Enrollment management. *New Directions for Higher Education*, (111), 65-73.
- Hu, S. & Hossler, D. (2000). Willingness to pay and preference for private institutions. *Research in Higher Education*, 41, 6, 685-701.

- Ivy, J. & Naude, P. (2004). Succeeding in the MBA Marketplace: Identifying the underlying factors. *Journal of Higher Education Policy and Management*, 26, 3, 401-417.
- Kattner, T. (2009, March). How College Admissions Offices Use Social Media. *Recruitment and Retention in Higher Education*, 23, 1-4.
- Kinzie, J.P., Palmer, M. Hayek, J., Hossler, D., Jacob, S.A., & Cummings, H. (2004). Fifty years of college choice: Social, political and institutional influences on the decision-making process. *Lumina Foundation for Education* 5: 1-65.
- Kirp, D.L. (2003). *Shakespeare, Einstein, and the bottom line: The marketing of higher education*. Cambridge, MA: Harvard University Press.
- Kotler, P. & Keller, K.L. (2006). *Marketing management 12e*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Lake Forest MBA Catalog (2007). [Brochure].
- Lancaster, L.C. & Stillman, D. (2002). *When generations collide*. New York: Harper Collins.
- Lapovksy, L. (1999). What you need to know about enrollment management. *New Directions for Higher Education*, (107), 5-15.
- Lauterhorn, B. (1990, October 1). New marketing titany: Four P's passé; C-words take over. *Advertising Age*, p.26.
- Lewison, D.M. & Hawes, J.M. (2007, Summer). Student target marketing strategies for universities. *Journal of College Admission*. 196, 14-19.
- Lohr, S. (2009, April 12). Crème de la career. *The New York Times*, A1.
- Long, B.T. (2004). How have college decisions changed over time? An application of the conditional logistic choice model. *Journal of Econometrics*. 121, (1-2) 271-296.
- Lowery, J. W. (2001). The Millennials come to campus [Review of the book *Millennials rising: The next great generation*]. *About Campus*, 6, 6-7.
- Maleny, G.D. (1987). Why students pursue graduate education, how they find out about a program, and why they apply to a specific school. *College and University* 62, 3, 247-58.
- Maleny, G.D. (1987 November). *A decade of research on graduate students: A review of the literature in academic journals*. Baltimore, MD: Association for the Study of

Higher Education Annual Meeting. (ERIC Document Reproduction Service No. ED292383)

- Merante, J., Huddleton, T., & Drexel, K. (2006, April). *National survey on website usage in graduate school search*. At the National Association of Graduate Admissions Professionals, Las Vegas Conference. New York: Random House.
- Nesheim, B.E., Guentzel, M.J., Gansemer-Topf, A.M., Ross, L.E., Turrentine, C.G. (2006). If you want to know, ask: Assessing the needs and experiences of graduate students. *New Directions for Student Services*, 115, 5-17.
- Nevill, S.C., & Chen, X. (2007). *The path through graduates school: A longitudinal examination 10 Years after bachelor's degree*. (NCES 2007-162). U.S. Department of Education, Washington DC: National Center for Education Statistics.
- Nichols, M. & Suda, R. (2001, November). Peeling the e-banana. *NZ Marketing Magazine*, 20, 40-42.
- Norris, J. (2007, May). Turn down the volume on the pain. *Career Education Review*, pp. 1-6.
- Paulsen, M.B. & St. John, E.P. (1997). The financial nexus between college choice and persistence. *New Directions For Institutional Research*, 95, 65-82.
- Polson, C. (1998, December). Fostering graduate socialization into adult education. *Adult Learning*, 10(2), 23. Retrieved July 2, 2007, from Academic Search Premier database.
- Polson, C. (2003). Adult graduate students challenge institutions to change. *New Directions for Student Services*, 102, 59-68.
- Punj, G.N. & Staelin, R. (1978). The choice process for graduate business schools. *Journal of Marketing Research*, 15, 588-98.
- Ruch, R. S. (2003). *Higher ed, inc. The Rise and Fall of For Profit Universities*. Baltimore: The John Hopkins University Press.
- Schulz, S.A. (2006). Mastering the admissions game: Understanding the enrollment priorities and recruitment strategies of master's institutions. *Dissertation Abstracts International*, (UMI No. 3237591).
- Srivastava, S. (2008, September 30). Executive MBA rankings: A special report. *The Wall Street Journal*, pp. R1.

- Swann, C.C. & Henderson, S.E. (1998). *Handbook for the college admissions profession*. Westport, CT. Greenwood Press.
- U.S. Department of Education, National Center for Education Statistics (1993). *Student financing of graduate and first-professional education: 1992-93* (Publication NCES #96-235). Retrieved March 4, 2008 from National Center for Education Statistics Online <http://nces.ed.gov/pubs/web/96235.asp>
- U.S. Department of Education, National Center for Education Statistics (2006). *Digest of Education Statistics* (NCES 2006-005).
- U.S. Department of Education, National Center for Education Statistics (2007). *Contexts of Postsecondary Education*, (NCES 2007).
- Westman, C. & Bouman, P. (2006). *Gamers go to college*. Washington, DC, American Association of Collegiate Registrars and Admissions Officers.
- Woodhouse, S. (2006, Spring). Faculty involvement in graduate student recruitment. *Journal of College Admission*, 26-32.
- Yankelovich, D. (2005, November 21). Ferment and change: Higher education in 2015. *Chronicle of Higher Education*, 52,(14), pp. B6-B9.
- Zalanowski, K. (2007, Summer). Instant messenger in enrollment management: Evaluating use and effectiveness. *Journal of College Admission*, 196, 20-29.

APPENDIXES

APPENDIX A

EMPP Survey Instrument
Education Marketing P Prism
 (Researcher Version)

Please indicate the degree of influence that each item below had on your ultimate decision to enroll in the MBA program.	Product Place Price Promotion Personal People				
Check one item on each line		Strongly Influenced			No Influence
Interaction		1	2	3	4
1. Speaking directly with an admissions counselor by phone.	Promotion				
2. Meeting in person on site with an admissions counselor.	Promotion				
3. Visiting the university for an evening or weekend for information such as MBA preview.	Promotion				
4. Interaction with university faculty.	People				
5. Personal contact with university alumni.	People				
6. Personal contact with an enrolled coworker	People				
Reasons to enroll					
7. Increasing my knowledge.	Personal				
8. The potential for increased pay in my current job.	Personal				
9. Obtaining a new skill set.	Personal				
10. Boss/supervisor's prompting	Personal				

11. Mentor's prompting	Personal				
12. To change my career.	Personal				
13. Achieving credibility in my career field.	Personal				
14. Anticipation of losing my job and/or being downsized.	Personal				
15. My sheer love of learning.	Personal				
16. Were there other influences in your decision to enroll? If yes, please type here.	Personal				
Concerns					
17. Handling the academic rigor of graduate study.	Personal				
18. Whether I will reap the benefits of having an MBA graduate degree.	Personal				
19. My ability to successfully balance work while pursuing my graduate degree.	Personal				
20. My ability to pay for graduate school or receive financial support for it	Personal				
Perceived academic ability					
21. Meeting the minimum GPA requirements of the program.	Personal				
22. Meeting required GMAT scores	Personal				
23. Meeting the required work experience admissions criterion	Personal				
24. Identifying two people to provide professional or academic recommendations.	Personal				
25. Were there other reasons that influenced your					

decision to enroll? If yes, please type here.					
Quality Indicators					
26. Size of University (total number of students).	Product				
27. University's academic reputation	Product				
28. University's accreditation	Product				
29. Program accreditation in my program of interest	Product				
30. Choice of major	Product				
31. Choice of electives in program	Product				
32. Frequency of course offerings	Product				
33. Total number of credits required	Product				
34. Total length/duration of the program	Product				
35. Having research as a focus in the program	Product				
36. Transfer credit policies	Product				
37. Academic credentials of University faculty	People				
38. Professional background or reputation of faculty members in the program	People				
39. University faculty diversity	People				
40. University student diversity	People				
41. Courses offered at times that fit my schedule	Place				
42. Courses offered part online and part in the classroom	Place				
43. Commuting distance to the university from home or from work	Place				
44. Advertising in the local market	Promotion				
45. University published reviews or national rankings	Promotion				
46. Tuition & fees for	Price				

program					
47. Availability of financial aid	Price				
48. Flexible tuition payments	Price				

	Regardless of how long ago you enrolled in the MBA program, please indicate whether each website item would be essential to you today when seeking information to enroll.	Essential On Website	Not Essential on Website	
	Website purpose (Promotion)			
		Yes	No	
	49. Admissions requirements			
	50. Assistance with how to fill out the application for admission			
	51. Alumni profiles			
	52. Catalog			
	53. List of programs offered			
	54. Financial aid information			
	55. Graduate faculty member profiles			
	56. Graduation rates by program			
	57. News and events in your field of interest			
	58. Profile of current student(s)			
	59. Scholarships			
	60. Student Testimonials			
	61. Tuition costs and fees			
	62. Other essential information?			

Demographic Data:

Please provide the following information:

1. Year of birth: _____
2. Gender: Male ___ Female ___
3. What is your ethnicity/race? Check one only.
 - _American Indian
 - _Hispanic
 - _African American Nonhispanic
 - _Asian
 - _Native Hawaiian or other Pacific Islander
 - _Native American
 - _White
 - _Biracial
 - _Other

4. Did your birth parents graduate with a bachelor's degree?

- Neither parent
- One parent
- Both parents
- Do not know

5. Did either of your parents obtain a master's degree?

- Neither parent
- One parent
- Both parents
- Do not know

6. How long before applying did you begin your search for a graduate school?

- _ 0-3 months
- _ 4-6 months
- _ 7-12 months
- _ 13-18 months
- _ 19+ months

7. Counting the private university as one, to how many other total universities did you **APPLY**? So if you applied to the private university and one other university, your response would be 2.

- _ 1
- _ 2
- _ 3
- _ 4
- _ 5+

8. Counting the private university as one, how many additional universities did you **INQUIRE** at and actually interact with - via phone, email or web chat?

- _ 1
- _ 2
- _ 3
- _ 4
- _ 5
- _ 6
- _ 7
- _ 8
- _ 9
- _ 10+

9. Do you have tuition reimbursement at your place of employment?

☐ Yes

☐ No

If yes, please indicate the percentage or annual dollar amount allotted for tuition reimbursement i.e. 100% or \$5,000 annually, etc.

APPENDIX B
HUMAN SUBJECTS APPROVAL LETTER

APPENDIX C

Letter to Participants

Dear

I am a doctoral student in the Educational Leadership program at Colorado State University. I am conducting a research project for my dissertation titled *Informing Graduate Enrollment Management Through Marketing and Admissions From the Student Perspective*. The purpose of this study is to study the factors that influence graduate students to enroll in an MBA program so universities better understand what factors influence students when they are making decisions to enroll in an MBA program.

Could you please do me a favor? As a student who is pursuing your MBA, you can contribute to this study by completing this survey. The survey will take about 12-15 minutes. If you will help by completing the survey at URL, your name will be entered into a drawing for the chance to win one of six Visa \$50 gift certificates. At the conclusion of the survey, your name will be entered into the drawing and your name will be separated from your survey response. Winners will be notified via email by September 1st.

Your participation is voluntary and you are free to refuse to participate or refuse to answer any questions without penalty. There are no known risks to participate in this study.

Your response is very important to the success of this study. Of course, the information will be kept completely confidential. Your identity will not be divulged to anyone. All survey responses will be destroyed after the data are entered for analysis.

Recognizing the many demands placed on your time, I am grateful for your participation and thank you in advance for your assistance. If you have any questions about this research project, please contact Dr. Carole Makela at 970-491-514 or Janell Barker, IRB Senior Coordinator, at 970-491-1655.

Sincerely,

Sandy Stack
Ph.D. Candidate
Colorado State University

Carole J. Makela, Ph.D.
Professor
Colorado State University

APPENDIX D

*Other Influential Factors From Open Ended Question
Ordered By Number of Responses*

Other Factors	Number of Responses
Location and convenience	24
Faculty in field/professionals	6
Company sponsorship	6
Current student diversity and diverse ages	5
Personal achievement	5
Marketable - have upper hand	5
No GMAT	5
Balancing work, family, study time	4
Career advancement	2
Program emphasis on management	2
Program strength and or quality	2
Help in answering questions and applying	2
Blend of technical knowledge w/business	2
Family support	2
Onsite versus online	2
Former Student/Alumni	1
Demonstration of life long learning to children	1
Books included	1
Course outline	1
Time required	1
Global management specialization	1
Admissions repeated phone contact	1
Looks good on resume	1
Career services	1
Price	1
No thesis requirement	1
Waived work experience	1
Out of school 20 years	1
Own business	1
Small class intimacy	1
Application of theory	1
Investment in self	1
School reputation	1
Total	92

APPENDIX E

Analysis of Variance of all Marketing Ps by Parents' Masters Education

	Source	Df	SS	MS	F	p
People	Between groups	2	.52	.264	.266	.767
	Within subjects	337	335.13	.994		
	Total	339	335.66			
Personal Academic Perception	Between groups	2	1.79	.894	.896	.409
	Within subjects	337	336.37	.998		
	Total	339	338.16			
Personal Performance	Between groups	2	.22	.114	.115	.892
	Within subjects	337	334.67	.993		
	Total	339	334.90			
External Prompting	Between groups	2	2.07	1.038	1.037	.356
	Within subjects	337	337.19	1.001		
	Total	339	339.26			
Place	Between groups	2	1.18	.590	.590	.555
	Within subjects	337	337.12	1.000		
	Total	339	338.30			
Price	Between groups	2	.21	.105	.105	.900
	Within subjects	337	337.23	1.001		
	Total	339	337.44			
Program Attributes	Between groups	2	3.90	1.950	1.975	.140
	Within subjects	337	332.74	.987		
	Total	339	336.64			
Program Quality	Between groups	2	.51	.256	.261	.771
	Within subjects	337	330.57	.981		
	Total	339	331.08			
Program Duration	Between groups	2	1.01	.506	.508	.602
	Within subjects	337	335.40	.995		
	Total	339	336.41			
Promotion Dir Interaction	Between groups	2	4.6	2.309	2.332	.099
	Within subjects	337	332.66	.990		
	Total	339	337.28			

APPENDIX F

t Tests of Marketing Ps by Generation

	Gen type	N	Mean	Std. Deviation	Std. Error Mean	Sig	t
People	Boomer	52	2.35	.75	.10	.38	.49
	Gen X	256	2.41	.74	.04		
Personal Academic Perception	Boomer	52	3.25	.69	.09	.14	3.82
	Gen X	256	2.80	.80	.05		
Personal Performance	Boomer	52	2.11	.81	.11	.08	2.18
	Gen X	256	1.88	.65	.04		
External Prompting	Boomer	52	3.43	.78	.10	.21	1.81
	Gen X	256	3.18	.89	.05		
Place	Boomer	52	2.05	.47	.06	.35	1.12
	Gen X	256	1.96	.52	.03		
Price	Boomer	52	2.79	.80	.11	.13	1.81
	Gen X	256	2.55	.88	.05		
Program Attributes	Boomer	52	2.74	.60	.08	.60	-.64
	Gen X	256	2.80	.64	.04		
Program Quality	Boomer	52	1.84	.72	.10	.60	.12
	Gen X	256	1.83	.68	.04		
Program Duration	Boomer	52	2.41	.86	.11	.65	.34
	Gen X	256	2.36	.83	.05		
Promotion Direct Interaction	Boomer	52	2.40	.76	.10	.11	.19
	Gen X	255	2.37	.86	.05		

APPENDIX G

EMPP Survey Instrument
Education Marketing P Prism
 (Student Version)

Please indicate the degree of influence that each item below had on your ultimate decision to enroll in the MBA program.				
Check one item on each line	Strongly Influenced			No Influence
1. Speaking directly with an admissions counselor by phone.				
2. Meeting in person on site with an admissions counselor.				
3. Visiting the university for an evening or weekend for information such as MBA preview.				
4. Interaction with university faculty.				
5. Personal contact with university alumni.				
6. Personal contact with an enrolled coworker				
7. Increasing my knowledge.				
8. The potential for increased pay in my current job.				
9. Obtaining a new skill set.				
10. Boss/supervisor's				

prompting				
11. Mentor's prompting				
12. To change my career.				
Check one item on each line	Strongly Influenced			No Influence
13. Achieving credibility in my career field.				
14. Anticipation of losing my job and/or being downsized.				
15. My sheer love of learning.				
16. 15. Were there other influences in your decision to enroll? If yes, please type here.				
17. Handling the academic rigor of graduate study.				
18. Whether I will reap the benefits of having an MBA graduate degree.				
19. My ability to successfully balance work while pursuing my graduate degree.				
20. My ability to pay for graduate school or receive financial support for it				
21. Meeting the minimum GPA requirements of the program.				
22. Meeting required GMAT scores				
23. Meeting the required work experience admissions criterion				
24. Identifying two people to provide professional or academic recommendations.				
25. Were there other				

reasons that influenced your decision to enroll? If yes, please type here.				
Check one item on each line	Strongly Influenced			No Influence
26. Size of University (total number of students).				
27. University's academic reputation				
28. University's accreditation				
29. Program accreditation in my program of interest				
30. Choice of major				
31. Choice of electives in program				
32. Frequency of course offerings				
33. Total number of credits required				
34. Total length/duration of the program				
35. Having research as a focus in the program				
36. Transfer credit policies				
37. Academic credentials of University faculty				
38. Professional background or reputation of faculty members in the program				
39. University faculty diversity				
40. University student diversity				
41. Courses offered at times that fit my schedule				
42. Courses offered part online and part in the classroom				
43. Commuting distance				

to the university from home or from work				
44. Advertising in the local market				
Check one item on each line	Strongly Influenced			No Influence
45. University published reviews or national rankings				
46. Tuition & fees for program				
47. Availability of financial aid				
48. Flexible tuition payments				

Regardless of how long ago you enrolled in the MBA program, please indicate whether each website item would be essential to you today when seeking information to enroll.			Essential On Website	Not Essential on Website
			Yes	No
		49. Admissions requirements		
		50. Assistance with how to fill out the application for admission		
		51. Alumni profiles		
		52. Catalog		
		53. List of programs offered		
		54. Financial aid information		
		55. Graduate faculty member profiles		
		56. Graduation rates by program		
		57. News and events in your field of interest		
		58. Profile of current student(s)		
		59. Scholarships		
		60. Student Testimonials		
		61. Tuition costs and fees		
		62. Other essential information? (Write in)		

Demographic Data: Please provide the following information:

1. Year of birth: _____
2. Gender: Male ___ Female ___
3. What is your ethnicity/race? Check one only.
_American Indian
_Hispanic
_African American Non-Hispanic
_Asian
_Native Hawaiian or other Pacific Islander
_Native American
_White
_Bi-racial
_Other
4. Did your birth parents graduate with a bachelor's degree?
-Neither parent
-One parent
-Both parents
-Do not know
5. Did either of your parents obtain a master's degree?
_Neither parent
-One parent
-Both parents
-Do not know
6. How long before applying did you begin your search for a graduate school?
_ 0-3 months
_4-6 months
_7-12 months
_13-18 months
_19+ months
7. Counting the private university as one, to how many other total universities did you **APPLY**? So, if you applied to the private university and one other university, your response would be 2.
_ 1
_ 2
_ 3
_ 4
_5+

8. Counting the private university as one, how many additional universities did you **INQUIRE** at and actually interact with - via phone, email or web chat?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10+

9. Do you have tuition reimbursement at your place of employment?

☐ Yes ☐ No

If yes, please indicate the percentage or annual dollar amount allotted for tuition reimbursement i.e. 100% or \$5,000 annually, etc.