

The Future of Marketing Scholarship: Recruiting for Marketing Doctoral Programs

Donna F. Davis and Teresa M. McCarthy

As demand for business education is rising, the production of business doctorates continues to fall. Between 1995 and 2001, new business doctorates declined 18%, dropping to the lowest point since 1987. In the same time frame, new marketing doctorates dropped by 32%. This article reports the results of a study designed to (1) assess enrollment trends and recruiting practices for marketing doctoral programs, (2) examine decision-making processes of prospective marketing doctoral students, and (3) develop a set of recommendations for improving recruiting in marketing doctoral programs. Results of surveys of marketing doctoral program coordinators, marketing Ph.D. students, and MBA students are reported.

Keywords: *doctoral education; student recruiting; marketing doctorates; trends; business education*

Doctorally trained individuals are the most essential element in assuring continued rigor of business education and research conducted in academic, business, and public policy institutions. Ensuring adequate supply must, therefore, be a primary concern from an industry perspective.

Association to Advance Collegiate Schools of Business
(AACSB) International (2003, p. 6)

The declining supply of business doctoral faculty is the principal concern of the AACSB study, "Sustaining Scholarship in Business Schools" (AACSB 2003). The study projects a shortage in the United States of 1,142 business Ph.D.s by 2008 and a growing gap between supply and demand to 2012. Although immediate demand for business doctoral faculty appears to be dampened as programs postpone hiring due to drastic reductions in higher education budgets, underlying factors that drive demand have not abated.

Two key factors drive demand for new business faculty: business school enrollments and faculty retirements. Business school enrollments in the United States are on the rise. Undergraduate enrollments are expected to increase approximately 13% from 2000 to 2012, and the number of MBA

degrees awarded is expected to rise 5% (U.S. Department of Education 2002). At the same time, faculty retirements have slowed as senior faculty delay retirement to allow financial markets to rebound. The proportion of faculty 55 and older has increased during the past decade from 20% to 30% (AACSB 2003). Although delayed retirements contribute to a temporary slowdown in hiring, they also create pent-up demand to be realized when retirements can no longer be deferred.

As demand for business education is rising, the production of business doctorates continues to fall. Between 1995 and 2001, new business doctorates declined 18% (Figure 1), dropping to the lowest point since 1987 (AACSB 2003; Hoffer et al. 2003). New marketing doctorates dropped 32% for the same period, nearly double the overall decline in new business doctorates.

Perhaps the most immediate consequence of this decline is the escalation of salaries for new business faculty. Between 2001 and 2002, the average salary of new business Ph.D.s increased 4.1% to \$91,100, higher than the average salary for associate professors in business. New marketing doctorates commanded \$88,800, an 11.6% increase over the prior year (AACSB 2002a).

Business schools that cannot afford either high starting salaries or the impact such salaries would have on faculty salary structures are excluded from the primary market for marketing doctoral faculty. As an alternative, many are turning to professionally qualified, rather than doctorally qualified, faculty to fill teaching positions, raising a longer term issue that strikes at the heart of marketing scholarship—the potential

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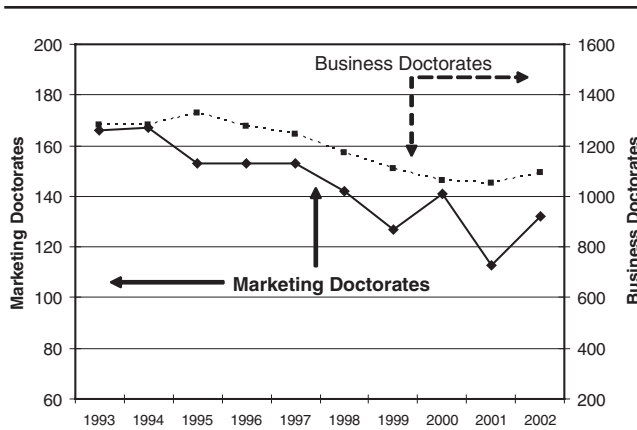


FIGURE 1: Ten-Year Trend in Marketing and Business Doctorates

erosion of the number of doctorally qualified marketing faculty.

Doctorally trained faculty are indispensable to the rigorous development, dissemination, and application of knowledge critical to the continued vitality of marketing scholarship (American Marketing Association [AMA] Task Force 1988; Boyer 1990). We adopt the broader view of scholarship proposed by Boyer (1990), who conceptualized scholarship as composed of four dimensions: discovery, integration, application, and teaching. The nexus of these four dimensions supports the notion and advancement of marketing as a science (Mentzer and Schumann 2004). Contrary to the dominant view equating scholarship only with research, Boyer articulated the symbiotic relationship between knowledge discovery and integration accomplished by research and dissemination carried out through teaching and application. Thus, the decline of doctorally trained faculty in marketing has the potential for adverse consequences not only in marketing research but also in marketing education and practice.

To address this issue, the AACSB study (2003) calls on individual business doctoral programs to take “decisive action” to reverse declines in doctoral education by attracting more students of high quality to their programs. Recommendations include improving the promotion of doctoral education to prospective students as well as fostering innovation in the delivery of doctoral education to better meet the needs of students. Marketing departments are uniquely positioned to take a leadership role by applying appropriate marketing tools to examine the fit between the needs of the marketplace and current doctoral programs. As a first step, this article responds to the call to improve the promotion of doctoral education by investigating recruiting for marketing doctoral programs.

The objectives of this study were to (1) assess enrollment trends and recruiting practices for marketing doctoral pro-

grams, (2) examine decision-making processes of prospective marketing doctoral students, and (3) develop a set of recommendations for improving recruiting in marketing doctoral programs. To these ends, we first examine secondary data sources related to business and marketing doctoral enrollment trends. We then describe our methodology and present results of surveys of marketing doctoral program coordinators, marketing Ph.D. students, and MBA students along with findings from previous studies of student decision making and university recruiting practices. Finally, we offer recommendations for improving recruiting in marketing doctoral programs, implications of the study, and directions for future research.

ENROLLMENT TRENDS

Growth in the number of Ph.D. degrees conferred by U.S. universities suffered a sharp decline in the early 1970s, followed by a staggered upward trend during the next 20 years and a subsequent steady downward trend in the 1990s (U.S. Department of Education 2002). The most recent report by the National Opinion Research Center at the University of Chicago (Hoffer et al. 2003) reports a continuing decline in the number of both marketing and business doctorates conferred at U.S. universities (see Figure 1). The number of marketing doctorates conferred dropped from 167 in 1994 to 113 in 2001, recovering somewhat with 132 in 2002.

In addition to the decline in the quantity of business doctorates awarded, the composition of the pool of new business doctoral faculty also presents concerns. First, only 61% plan to pursue careers in academe, down from 76% in 1990 (AACSB 2003). Second, the AACSB reports a continuing shortage of female and minority faculty. Female undergraduate business enrollments are more than 45% and growing, whereas only 24% of business faculty are female. Similarly, 30% of business undergraduates are ethnic minorities, whereas 17% of business faculty represent ethnic minorities (AACSB 2003; U.S. Department of Education 2002).

A third concern is the growing percentage of business doctoral students who do not hold U.S. citizenship. International students accounted for virtually all of the growth in the number of doctorates awarded since 1972. Doctorates awarded across all disciplines to students with temporary visas rose from 9% in 1972 to 14% in 1982, rising again and leveling off at 26% from 1992 forward. Professional doctorates (the broad field of study of which marketing is a part) experienced a slightly higher percentage of doctorates awarded to international candidates, rising from 10% in 1972 to 28% in 2002 (Hoffer et al. 2003). Currently, more than half the students enrolled in U.S. business doctoral programs are international students without permanent visas (AACSB 2002b). As global demand for business doctoral faculty grows due to the expansion of business programs abroad, international students may

increasingly opt to return to their own regions rather than pursue academic appointments in the United States.

METHODOLOGY

Marketing doctoral program coordinators, marketing Ph.D. students, and MBA students were surveyed to learn more about recruiting practices and student decision making for marketing doctoral programs. Web-based questionnaires¹ were developed for each of the three samples, and respondents were contacted by e-mail with a URL-embedded link to the survey. Follow-up e-mail reminders were sent 10 days after the first survey distribution.

The coordinator survey was designed to determine recruiting practices as well as current application and enrollment trends in the marketing discipline. Sixteen questions were developed and pretested with a convenience sample of coordinators and other marketing faculty to address readability concerns. The final questionnaire was sent to a pool of 58 marketing doctoral program coordinators identified by consulting the 2000 edition of *Peterson's Guide to Business Schools* and reviewing listings on the GradSchools.com Web site (GradSchools.com n.d.). Twenty-three coordinators returned completed surveys resulting in a 39.7% response rate. A roster of doctoral program coordinators subsequently obtained from a professional marketing educators' association listed 96 marketing doctoral programs, introducing the possibility of sampling error for this study. Given the lack of statistical representation in the sample, results from the coordinator study should be interpreted with caution.

The primary objective for both the Ph.D. and MBA student surveys was to learn about students' decision-making processes. The survey requested information related to personal and program-related factors as well as issues that might influence the acquisition of information about marketing doctoral programs. Both surveys were pretested for readability with convenience samples. For the Ph.D. sample, surveys were sent to all 226 doctoral students included on the American Marketing Association's student membership roster.

For the MBA sample, 730 surveys were distributed to a convenience sample composed of current MBA students and recent MBA graduates at the University of Notre Dame, the University of San Diego, the University of Tennessee, and the University of Wisconsin. These universities represent different geographic regions of the United States as well as public and private universities. Response rates for the Ph.D. and MBA surveys were 46.9% ($N = 106$) and 32.9% ($N = 240$), respectively.

Current and former MBA students were selected to represent prospective students' views because they are a large, readily identifiable pool of prospective students for marketing doctoral programs. Although marketing doctoral programs also enroll students with no graduate education or with

graduate study in other disciplines, such potential students are more difficult to identify as a "pool" of prospective students. The survey was designed to obtain information from MBA students currently considering Ph.D. programs in marketing, those who might consider entering a program at some point in the future, and those who are not considering pursuing a Ph.D. as part of their career plans.

Demographic information was collected for both Ph.D. and MBA student respondents to determine if factors such as age, gender, prior work experience, status in the program, or citizenship affected survey responses. No significant differences were found. Among the MBA students surveyed, no significant differences were found for geographic region or institution type. The following sections present and discuss the analysis and findings.

ANALYSIS FRAMEWORK

The brand elimination (BE) framework was used to analyze findings related to student decision making. Developed by Narayana and Markin (1975), the BE framework is a model of consumer choice that suggests consumers reduce alternatives to a manageable number to facilitate choice among the most viable alternatives.

Adapting the BE framework to doctoral student decision making, the student moves from an *awareness set* (the set of known alternatives) to a *consideration set* and then to a *choice set*. Programs in the consideration set are sorted into three categories: (1) the inept set, (2) the inert set, and (3) the evoked set. The inept set is composed of those programs that induce a negative reaction, and the inert set consists of those programs that fail to inspire either a negative or positive reaction. Members of both the inept and inert sets are eliminated from further consideration, leaving the evoked set, which consists of programs that inspire a positive reaction.

Doctoral students submit applications for admission to programs in their evoked sets. A wrinkle in the adaptation of the BE framework to doctoral student decision making occurs at this point as the decision shifts from prospective students to doctoral program coordinators. Students' choices are limited to programs that have accepted them for admission. Therefore, doctoral program coordinators play a significant role in forming the choice set—the group of programs from which the student will choose a program in which to enroll. Once offers of admission are extended, decision making returns to student control, and the student applies various decision rules to select a program for enrollment.

As prospective doctoral students narrow alternatives, marketing doctoral program coordinators are also engaged in a selection process to winnow the pool of prospective students. The typical academic program faces a large pool of prospective students that decreases at each stage of decision making, ultimately yielding the incoming class of enrolled students.

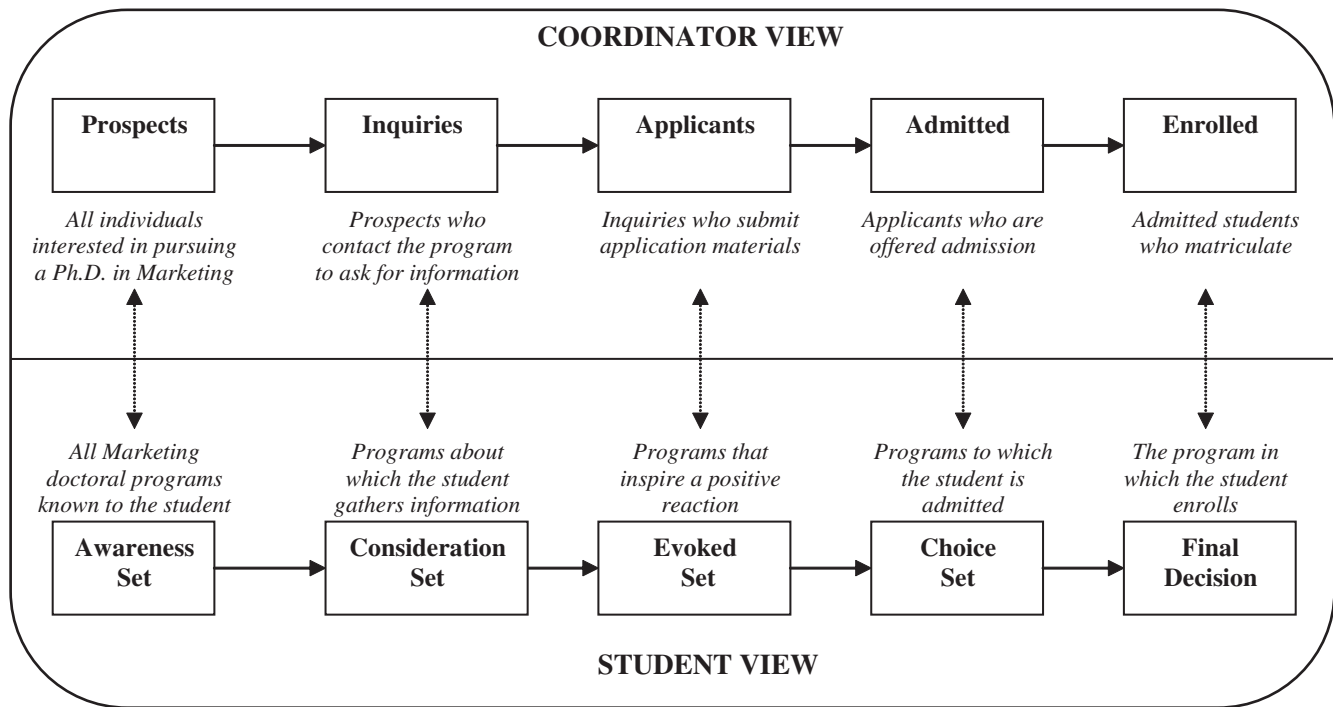


FIGURE 2: Matching Recruiting Activities with Student Decision Making

Throughout the process, both prospective students and doctoral program coordinators are making decisions about continuing or dissolving recruiting relationships. As suggested by Rosen et al. in their study of undergraduate recruiting practices (1998), it is desirable for coordinators to match activities at each step in the recruiting process (the coordinator view) with the decision-making stages of prospective students (the student view), as displayed in Figure 2.

FINDINGS

Marketing Doctoral Enrollment Trends

Marketing doctoral program coordinators reported no significant change in the number of applications between 1996 and 2000. Matriculation figures fluctuated slightly throughout the 5-year period but remained level overall. These results are consistent with AACSB findings for marketing doctoral programs (2003). To determine the outlook for the production of business doctorates, the AACSB gathered data by interviewing deans and doctoral program coordinators and mailing questionnaires to 220 AACSB member schools known to have doctoral programs. Of 125 completed surveys, 85 (68%) represented U.S.-based programs. Seventy-five percent of business doctoral programs reported an increase in applications between 1997 and 2001; however, marketing

programs remained fairly stable, accounting for 11% of all business programs that experienced increased applications and 12% of business programs that experienced decreased applications during the past 5 years.

Looking to the future, 60% of doctoral program coordinators in the AACSB survey expected applications to increase during the next 5 years, but only 28% expected offers of admission to increase. Eighty-six percent of respondents from U.S. programs reported having a limit on doctoral program enrollments. Among the 23 schools responding to our marketing coordinator survey, more than half were under-enrolled for the most recent year and for the 5-year period from 1996 to 2000. On average, two new students enrolled each year, whereas marketing doctoral program capacity was three students per year.

Questions aimed at understanding factors that might shape recruiting activities revealed that coordinators perceived their departments to devote adequate human and financial resources to doctoral recruiting. Coordinators were asked to rank the priority given to various degree programs within their departments. Not surprisingly, the majority indicated that MBA programs received top priority. Business school rankings are based on MBA program evaluations, and there are no similar incentives for increasing attention to doctoral programs. In addition, MBA programs are a major source of revenue for many business schools, whereas doctoral pro-

grams represent a significant expense. The most frequently cited concern in the qualitative comments provided by coordinators related to the composition of the applicant pool. Specifically, they were concerned about the high ratio of international versus domestic applications. The AACSB (2003) also determined the composition of the applicant pool to be a significant issue; however, the basis for concern was different. Sixty-eight percent of coordinators in the AACSB study indicated "quality of doctoral program applicants" as a limiting factor to enrollment growth, and 54% responded that "improved quality of doctoral program applicants" would influence decisions to increase the number of students admitted. The following sections examine students' and coordinators' views of the recruiting process for marketing doctoral programs.

Student Decision Making

To test the applicability of the BE framework to doctoral student decision making, it was necessary to determine if there was a significant reduction in the number of alternatives for respondents at each subsequent stage of decision making. To answer this question, marketing Ph.D. students were asked to report the number of programs they (1) initially evaluated, (2) submitted applications to, and (3) received offers of admission from. Responses to these three items were treated as a repeated measure throughout time (i.e., number of viable alternatives remaining at each subsequent stage) for each respondent. Repeated measures designs are appropriate when analysis involves multiple treatments throughout time (e.g., stages in the decision-making process) using the same subject to exclude sources of variability between subjects (Neter et al. 1996).

The average number of alternatives among respondents reduced from 5.5 programs evaluated to 3.5 applications submitted and 2.0 offers of admission received. The repeated measures ANOVA of the number of programs remaining at each stage of decision making revealed significant differences ($F = 66.059$, $p = .000$) in support of the narrowing-down process proposed by the BE framework. Pairwise comparisons of the estimated marginal means were significant at the .05 level (using the Bonferroni adjustment for multiple comparisons). Nearly 27% of students evaluated 10 or more programs, whereas about 40% evaluated 1 to 3 programs. In contrast, fewer than 5% submitted applications to 10 or more programs, and 55% submitted applications to 1 to 3 programs. Table 1 displays percentages of students grouped by the number of programs at each stage of decision making. The pattern of percentages lends further support to the applicability of the BE framework in the context of decision making by prospective marketing doctoral students. The following sections present and discuss findings organized around stages in the BE framework.

TABLE 1
PERCENTAGE OF STUDENTS FOR NUMBER OF PROGRAMS BY DECISION-MAKING STAGE

<i>Number of Programs</i>	<i>Evaluated (%)</i>	<i>Applied (%)</i>	<i>Admitted (%)</i>
10 or more	27	5	0
7-9	10	11	3
4-6	23	29	9
1-3	40	55	88

Awareness stage. Among MBA students surveyed, 91% indicated they were not currently considering a Ph.D. program in marketing; however, 32% indicated they would consider entering a Ph.D. program in the future. When MBA respondents not considering a Ph.D. program were asked why, 72% reported they were not interested in an academic career primarily due to the perceived low financial compensation compared to a corporate career. Qualitative responses offered by MBA respondents supported this finding. For example, one respondent stated, "[I] am not sure the Ph.D. would add dollars to my pocket above the MBA/CPA," and another stated, "Most Ph.D.s . . . receive poor pay compared to MBAs." Other top reasons cited for not considering a marketing Ph.D. program included the length of doctoral programs and financial commitments.

These results are consistent with AACSB results from a survey of honors business undergraduates (2003). Students ranked financial rewards of academic careers substantially lower than careers in management, estimating earnings of new business doctorates in 2001 to be \$70,000 annually, well below the actual average salary of \$85,900 (AACSB 2003). Interestingly, more than half the respondents were accounting or finance majors for whom average starting faculty salaries were \$95,000 and \$101,500, respectively. It appears that many prospective students eliminate academic careers from consideration early on based on misperceptions about potential earnings.

Current doctoral students were asked why they chose to undertake doctoral study. Consistent with prior research examining factors that influence an individual's decision to pursue the Ph.D. (Bloom and Coan 1979; Braddock 1986), students in this study reported goals involving challenge such as a sense of accomplishment, quest for knowledge, and status: "I wanted to test my own capabilities in terms of intellectual challenges." The most commonly mentioned personal goal reported in this study (25% of respondents) was lifestyle flexibility, a goal not mentioned in previous research. For example, a respondent who had been working as a research consultant stated, "I wanted to have time to do independent research [on] *my own* research projects." Another respondent referred to the flexibility in work schedules that an academic career can provide: "I don't like 9 to 5 jobs. I prefer working

more, getting up late and working late, very late.” For some, lifestyle flexibility meant less travel; for others, it meant more travel. For most, it meant breaking away from the rigid corporate lifestyle.

Current MBA students who indicated they would consider entering a Ph.D. program at some point in the future were asked where they would begin searching for information on doctoral programs. They indicated they would first seek out information using secondary sources such as (1) visiting university Web sites, (2) contacting former professors (not necessarily associated with the discipline under consideration), and (3) consulting Ph.D. guidebooks such as *Peterson's Guide*.

Consideration stage. MBA respondents currently considering Ph.D. programs rated the importance of several factors in selecting programs to which they would apply. The most important factors were (1) faculty reputation, (2) faculty-student relationships, (3) college ranking, and (4) the quality of academic facilities. Asked how they learned about marketing doctoral programs they were considering, half of the MBA students indicated that friends or family members were important sources of information. The second highest response was contact with a faculty member in the program under consideration, followed by Web sites, course catalogs, contacts by current Ph.D. students, and brochures.

In comparison, current Ph.D. students were asked how they learned about the programs in which they ultimately enrolled. The primary information sources they recalled were (1) departmental Web sites; (2) contact by a university faculty member; (3) recommendation of faculty from previous undergraduate or graduate programs, or contact by a current Ph.D. student (tied for third most frequent information source); (4) recommendations of friends or family members; and (5) guidebooks.

Interestingly, MBA students who were currently considering marketing doctoral programs most frequently cited friends and family as an important source of information, whereas current Ph.D. students listed this source behind primary information sources such as departmental Web sites and contact with faculty and students in the program under consideration. This is likely a reflection of differences in the early and late stages of decision making within the consideration stage. Early on, the sorting of alternatives appears to involve informal, cursory review of general knowledge about broader concerns. As prospective students become more serious about evaluating options, they rely more heavily on firsthand information available only through direct contact with programs.

Choice stage. In making the final selection of their marketing doctoral programs, Ph.D. student respondents were asked to indicate the level of importance placed on several factors. Factors considered most important to Ph.D. students as they made their choices were (1) faculty-student relationships, (2) financial assistance, (3) location, and (4) research inter-

ests of faculty. Ph.D. respondents were also provided the opportunity to offer additional factors they considered important in the final stages of the decision-making process. Factors most commonly mentioned included family considerations such as quality of life in the community (27%) and job opportunities for spouses (12%). These additional criteria appear to be more personal and pragmatic than the program-related factors in the consideration stage.

Two factors considered least or not at all important in making the final decision were college ranking and the quality of academic facilities. Although these factors were reported to be important to MBA students in the consideration stage, it appears that only those programs meeting minimum requirements on these criteria were included in the choice sets for Ph.D. students.

On average, 7.2 months ($SD = 5.0$) elapsed between the initial search for information and the acceptance of an offer of admission. To gauge the level of proactive recruiting practices, Ph.D. students were asked how often they were contacted by their program coordinators prior to making a final decision. Students recalled being contacted by program coordinators on average 1.55 times ($SD = 1.31$) prior to acceptance of an offer.

Recruiting Practices

The most commonly cited method used by doctoral program coordinators to generate a pool of prospective students was referrals initiated by their own faculty and alumni. Guidebooks were the next most commonly cited method, with one-third of respondents indicating guidebooks as important to providing information to potential students at the awareness stage. Only two coordinators identified departmental Web sites—the top information source preferred by students at the awareness stage—as a tool for generating a pool of prospective students. Coordinators did not consider students' second preferred source of information—former faculty from graduate or undergraduate programs—as a means for identifying prospective students. The Ph.D. Project symposium (Ph.D. Project n.d.) and posters with tear-off cards were less frequently cited methods of generating awareness among potential students. None of the respondents identified the use of mailing lists or advertising in magazines and newspapers as methods of building awareness for their programs.

All coordinators reported using some form of personal contact to convey information to students after their initial contacts with programs. The most commonly used method of personal contact at this stage of the process was e-mail (100%), followed by telephone calls (91%), campus visits (83%), and letters (65%). Although coordinators did not perceive Web sites to be an important resource for building awareness by providing information *prior* to the first contact from potential students, coordinators reported Web sites to be the second most commonly used method to provide informa-

TABLE 2
MATCHING COMMUNICATION CHANNELS, MESSAGES, AND TIMING

<i>Students</i>	<i>Coordinators</i>	<i>Communication Channels</i>	<i>Messages</i>	<i>Timing</i>
Awareness	Prospects	Departmental Web site Business faculty word-of-mouth Guidebooks	Financial benefits of academic career: average starting salaries, fringe benefits Quality of life benefits: intellectual challenge, sense of accomplishment, status, lifestyle flexibility	Ongoing
Consideration	Inquiries and applicants	Departmental Web site Personal contact with faculty and current Ph.D. students Course catalogs Brochures	Faculty reputation Faculty-student relationships College ranking Quality of academic facilities	Systematic
Choice	Admitted	Personal contact with faculty and current Ph.D. students Campus visits Benefits of location	Quality of faculty-student interaction Financial assistance information Faculty research interests Quality of community life	Immediately responsive

tion to individuals *after* the first contact had been made. In addition to directing students to departmental Web sites, coordinators reported using brochures, handbooks, and course catalogs to communicate program information to prospective students.

RECOMMENDATIONS

Twenty-five years ago, Bloom and Coan (1979) recognized that many Ph.D. programs relied on program reference materials “dominated by imposing details about degree requirements and faculty publications” (p. 621). They recommended incorporating information important to prospective students in reference materials and making the materials available in the form most frequently used by students. Results of our study affirm the wisdom of these recommendations and provide a framework for implementing this advice. Specifically, this study suggests that recruiting effectiveness in marketing doctoral programs would be improved by using the BE framework to (1) select appropriate communication channels for transmitting doctoral program information, (2) develop relevant messages for each stage of student decision making based on information needs of prospective students, and (3) determine the timing of communications with prospective students (see Table 2).

Selecting Communication Channels

The results of this study strongly suggest that marketing doctoral program coordinators should pay close attention to departmental Web sites as vehicles not only for communicating specific program information to students who have contacted them, but also to build awareness for their programs. Recognizing Web sites as a primary source of information for students in both the awareness and consideration stages of

decision making, coordinators would be advised to routinely audit departmental Web sites to determine the extent to which they meet information needs of students at both stages of decision making. At the awareness stage, visibility is important as prospective students seek to identify marketing doctoral programs; navigation becomes important for students in the consideration stage who are seeking specific program information.

A fundamental visibility check is the prominence of the marketing doctoral program on the departmental Web site. The doctoral program should be readily evident to prospective students who visit the departmental Web site. Furthermore, there should be links to the site from appropriate locations within the university Web site. For example, students may first visit the business school, graduate programs, or admissions Web site looking for marketing doctoral program information. Finally, a check of search engines and search directories should be routinely conducted to assure program visibility in search results for marketing doctoral programs.

Ease of navigation can be evaluated through routine analyses of clickstream data to determine the number of visitors to the site, where these visitors are linking from, how long visitors stay at the site, and which pages are most often viewed. This information can be used to improve navigation by making popular pages more prominent and revamping or eliminating “dead” pages that are never visited. Coordinators could enlist current students to test the ease of navigation by surfing the site and providing feedback on both the look and feel of the site as well as how easy or difficult it is to find important doctoral program information.

Knowing that prospective students often turn to former faculty for advice, coordinators should consider providing information about doctoral programs to a broad spectrum of business faculty at their own institutions as well as other insti-

tutions. As a first step, doctoral program alumni who hold academic appointments could be provided with current information to equip them to offer accurate advice about doctoral programs and to prompt them to recommend promising students for doctoral programs at their alma maters. A second target could be faculty in business and closely related disciplines at universities that do not have marketing doctoral programs.

Guidebooks were reported to be important to students as they searched for information in the early stages of decision making. Coordinators should examine popular guidebooks to see if their programs are listed and accurately described. Several online versions of guidebooks also provide hyperlinks to programs that should be checked, because these listings appear to be important to program visibility in the awareness stage of decision making.

Personal contacts are important to students in the consideration and choice stages of decision making. Coordinators who facilitate contacts with prospective students by doctoral faculty and doctoral students through e-mail, telephone calls, and face-to-face meetings are using appropriate communication channels with these prospective students. In addition to using personal contacts to respond to students who have asked for program information, coordinators should also consider using this powerful method to proactively identify prospective students. For example, participation in existing university undergraduate and graduate job fairs offers an opportunity to present accurate information to prospective students about the benefits of academic careers as well as specific program information. Similar information could also be provided to alumni at alumni events. The timing of personal contacts deserves special consideration and is discussed subsequently.

Developing Relevant Messages

Recruiting effectiveness can be improved by developing messages appropriate for information needs at each stage of decision making. Results of this study support the findings of the AACSB (2003), suggesting the need for a two-pronged delivery of information at the awareness stage of decision making: (1) awareness of the benefits of pursuing an academic career and (2) awareness of the benefits of specific marketing doctoral programs.

Increasing the level of awareness of the benefits of an academic career will require a concerted effort by the higher education industry; however, individual departments should also address this issue in their recruiting efforts. Relevant messages could include information about doctoral student placements, average starting salaries, and summaries of financial fringe benefits of an academic career in marketing. In addition, creating an awareness of the quality of life issues associated with an academic career path such as intellectual challenge and lifestyle flexibility would demonstrate the potential

for attaining desirable personal goals frequently mentioned by respondents.

As prospective students seek information about the benefits of specific marketing doctoral programs, they want to know about both tangible program factors such as quality of academic facilities as well as intangible issues such as college rankings, faculty reputations, and faculty-student relationships. Accurate and timely communication of this information is critical, because it will be used to eliminate programs from consideration as students determine the programs to which they will apply.

In the final stage of decision making, core program characteristics such as the quality of faculty-student relationships and faculty research interests continue to weigh heavily. In addition, more personal and pragmatic issues arise including financial assistance, quality of life in the community, and job opportunities for spouses. At this stage, the method of communication also conveys a message; that is, the level of responsiveness and personalization demonstrates to prospective students the extent to which programs value faculty-student interaction. In addition, personal contacts at this stage of decision making assure that prospective students' particular concerns about personal issues will be addressed as they decide where they will enroll.

Timing Considerations

Marketing doctoral programs must recognize that the size and quality of the initial pool of prospects generated by recruiting activities at the awareness stage constrain the number and quality of prospective students at each subsequent stage. Building awareness requires *ongoing* communication through multiple channels throughout a long period of time. Coordinators in this study reported referrals from their own faculty and alumni to be the most frequently used method for building a pool of prospective students. Managing word-of-mouth is important to awareness, but it must be supplemented with ongoing, proactive efforts to reach out to prospective students.

As students enter the consideration stage of decision making, communication should be *systematic*. There should be a system in place to assure the timely transmission of information to students who have asked for information about the doctoral program and to evaluate their continuing interest in the program. In addition to messages aimed at addressing concerns of students in the consideration stage of decision making, program coordinators should also consider how they will communicate critical dates such as application and fellowship deadlines, and campus visit dates. Once prospective students submit applications, they should be routinely advised of their status (e.g., completed or awaiting recommendation letters or transcripts) through systematic mailings or online status checks. This study found that prospective students spend about 7 months in this stage of decision making.

Coordinators should consider how they will maintain continuous contact with prospective students during this period to build relationships and to assure timely completion of the application process.

In the choice stage of decision making, it is important to assure that communication is *immediately responsive* to students' concerns and questions. Assuring responsiveness may mean training frontline employees such as departmental staff members and work-study students to provide routine information or to send calls from prospective students to an available faculty member who can respond to more complex questions about the program. Given that students reported an average of only 1.5 contacts as they were considering alternatives, programs that assure responsive communication with prospective students will have an advantage.

IMPLICATIONS AND FUTURE RESEARCH

This study has implications for both the marketing discipline and individual marketing departments. At the discipline level, the study suggests the need for a dialog about the potential effects of the downward trend in the production of marketing doctorates on marketing scholarship. As higher education budget cuts force program reductions, departments may elect to scale back their doctoral programs. Coordinators in this study reported that their programs are at less than enrollment capacity. Given the time it takes to complete a doctoral program, periods of low enrollments will have an effect on the production of marketing doctorates for several years.

A second response to budget cuts may be increasing reliance on professionally qualified faculty. Part-time instructors already comprise about 50% of business school faculties (AACSB 2003). Although these professors of practice play an important role in meeting the growing demand for undergraduate marketing education, they are limited in their ability to teach beyond the undergraduate level or to contribute to the advancement of the marketing discipline through knowledge generation and service. If the downward trend in the production of marketing doctorates is not reversed, increasing pressure on doctorally qualified faculty may jeopardize both the advancement of marketing knowledge through research and the quality of learning as the research mission of the discipline is weakened.

As noted in the AACSB study (2003), changing the supply of new business doctorates will require cooperative efforts. Although individual marketing doctoral programs can contribute to this effort by improving recruiting effectiveness, they should also consider soliciting assistance from and working in conjunction with other programs within their business schools as well as throughout their universities to assure efficient use of resources in improving doctoral program recruiting practices. National associations such as the

American Marketing Association, the Academy of Marketing Science, and the Society for Marketing Advances should be encouraged to join with the AACSB in promoting the advantages of an academic career and the value of the marketing doctorate. The Ph.D. Project, sponsored by KPMG, is an excellent model of a cooperative effort between higher education and business to increase the number of doctorally qualified minority business faculty (for more information, see Ph.D. Project n.d.).

Calling for cooperation among doctoral programs raises the issue of the level of competition among programs. Certainly, there are programs that are direct competitors for prospective students. Cooperation and competition are not, however, mutually exclusive. Cooperation has long been the norm in improving undergraduate admission effectiveness, evidenced by joint recruiting activities and programs supported by the College Board and the National Association of College Admission Counseling. As marketing doctoral programs attempt to improve recruiting effectiveness, efforts to share best practices in doctoral recruiting would be helpful. For example, dissemination of cases studies could not only share success stories but also report efforts that were disappointing so that programs considering such activities might weigh the experience of others before undertaking them.

Several directions for future research arise from study limitations. First, as previously mentioned, the sample of marketing doctoral program coordinators was problematic. A study using a representative sample of this population could yield additional insights. In addition, this study used MBA students to represent the viewpoints of prospective students. Extending the study to other prospective student populations such as graduate students in other disciplines, undergraduate students, and people who are currently full-time employees would help program coordinators to better target specific segments in the pool of prospective students.

This study was limited to supply and demand issues in the United States; however, business education today is clearly a global enterprise. There is evidence to suggest that programs in the United States are net importers of both Ph.D. students and doctorally qualified faculty. International student enrollments in business Ph.D. programs are rising, and the majority of new international business doctorates report plans to stay in the United States (AACSB 2003; Hoffer et al. 2003). This imbalance is likely to have effects on business education in other countries. One study that touches on this issue found that

38 percent of positions in Canadian business schools were filled with candidates (both new Ph.D.'s and experienced faculty . . .) from outside of Canada. It is unclear that this is sustainable given the building level of demand and suppressed supply in the U.S. (Feltham et al. 2001)

As business education grows worldwide, it will be important to evaluate and anticipate possible effects on the marketing discipline of global shifts in supply and demand for doctorally trained faculty.

This research was premised on the assumption that an academic career is inherently attractive. It would be interesting to further explore the value proposition of an academic career as perceived by prospective students and current faculty. Respondents in this study were aware of the quality of life benefits afforded by an academic career; however, they appeared to be misinformed of the financial compensation associated with a business faculty appointment. They also expressed concerns about other costs of the career such as the time and money required to pursue a Ph.D. How do prospective students evaluate the cost-benefit ratios of various career options, and how does the academic career fare in comparison? Are there fundamental issues that make the academic career unattractive to prospective students with high potential?

Another interesting and useful study could compare perceptions of prospective students and doctoral faculty on various dimensions of doctoral education. For example, how similar or different are expectations for the knowledge and skills to be acquired in Ph.D. programs? The quality of faculty-student relationships was reported to be important to prospective students as they chose the program in which they enrolled. How close are perceptions on expectations about faculty-student relationships? How much mentoring do prospective students expect to receive, and how much guidance are doctoral faculty willing to give?

Research on additional marketing mix variables could help to determine which elements are most important to prospective students. For example, at what point is location a critical factor in student decision making? Is "location" relative to the student's current residence, or are there preferences for particular areas of the country? Also, what role do costs—both financial and psychological—play in the decision-making process? Gaining a better understanding of the role of Web sites in promoting doctoral programs is also a promising direction for future research. A growing body of scholarly literature examines the use of Web sites that could provide a foundation for further exploration of this topic. Marketing doctoral programs are expensive, complex, intangible products that have far-reaching effects on the consumer's lifestyle. Why are Web sites the top information source in such a situation? What Web site features are necessary for the successful delivery of information? How do current marketing doctoral program Web sites measure up?

Differences on several dimensions among students in this study point to the possibility of segmenting the pool of prospective students to achieve more effective targeting and to develop bases for program differentiation. For example, the distribution of students among the number of programs evaluated may point to segments based on light and heavy search

behavior. How do students who evaluate and apply to 10 or more programs differ from those who evaluate and apply to 1 to 3 programs? Some students in this study relocated great distances to enroll in doctoral programs, whereas others did not relocate or relocated only short distances. Do students perceive programs to have global, national, or regional markets? Further exploration of perceived differences among programs could help coordinators better understand how to position the benefits of their programs. Future research is needed on the nature of competition for doctoral programs and the viability of program differentiation as a strategy to gain sustainable competitive advantage.

CONCLUSION

The downward trend in new marketing doctorates has the potential for profound effects on the marketing discipline. As business enrollments continue to grow and the supply of doctorally trained faculty decline, the scarcity of resources for research and teaching will soon reach a crisis point. As stated by Boyer (1990, p. 1), "Scholarship is not an esoteric appendage; it is at the heart of what the profession is all about. . . . [T]o weaken faculty commitment to scholarship . . . is to undermine the experience, regardless of the academic setting." The vitality of doctoral programs is essential to sustaining marketing scholarship. Protecting this critical resource should become a top priority for the marketing discipline.

NOTE

1. Copies of the questionnaires are available on request from the authors.

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