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The Fit For and Interest in a Proposed Doctoral Program in Business Administration by Retirement-Eligible Military Commanders

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THE FIT FOR AND INTEREST IN A PROPOSED DOCTORAL PROGRAM IN BUSINESS ADMINISTRATION BY RETIREMENT-ELIGIBLE MILITARY COMMANDERS

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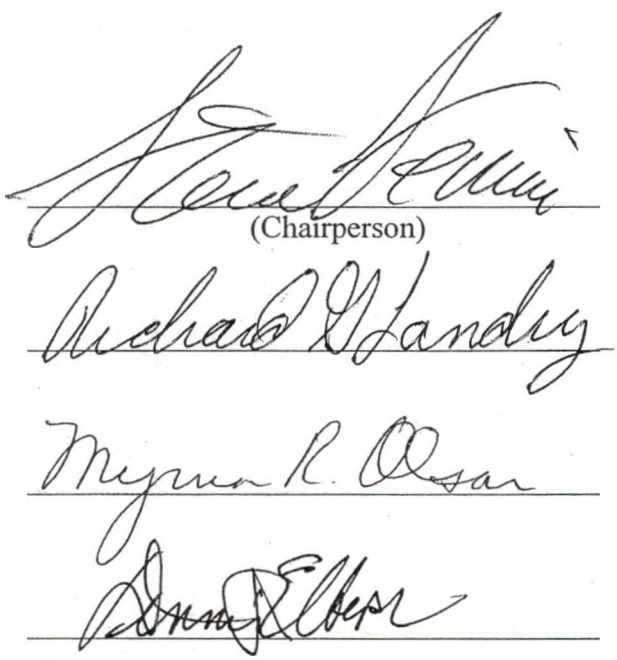
This dissertation, submitted by Anthony B. Williams in partial fulfillment of the requirements for the degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.



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This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

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ABSTRACT

From 1954 to 2003, a rapid expansion of colleges and universities offering doctoral degrees in Business Administration has occurred. This considerable growth, coupled with increasing business school faculty member retirements, have led to a national shortage of academically-qualified faculty members. This study was conducted to determine if retirement-eligible Air Force commanders would be a good fit for and interested in a proposed doctoral program in Business Administration. This proposed Doctor of Business Administration concept program was designed to enable these commanders to accept a faculty position in a school of business while completing their doctoral degree. This is accomplished through a combination of on-line classes and collaborative research conducted by the student under the mentoring of a professor at the university where the retired commander is employed. The commander works and collects the salary of an Assistant Professor while completing the proposed Doctor of Business Administration degree.

A total of 36 retirement-eligible Air Force commanders completed a survey assessing their fit and interest in this concept program. The sample consisted of 31 Lieutenant Colonels and 5 Colonels who are or have been commanders in the United States Air Force. Of the 36 respondents, 5 were female and 31 were male.

Six research questions were used to assess fit and interest in a proposed concept Doctor of Business Administration program. Fit was assessed by the ability to overcome

two entry barriers (Monetary Cost of Program and Time Required to Complete Degree) and three completion barriers (Ability to Work With A Mentor, Availability of Program, and Ability to Support Self/Family) identified as reasons for the lack of obtaining a doctoral degree.

The findings of this study revealed that retirement-eligible Air Force commanders felt they were a good fit for and were interested in the proposed concept program. With these findings, it was recommended that this program should be implemented as a way to increase doctoral-prepared faculty members at business schools across the country.

CHAPTER I

INTRODUCTION

A recent investigation into on-line graduate degrees found that 927 colleges and universities in the United States offer a master's or doctoral degree in Business Administration. To put this fact into perspective, in 1954, 21 institutions granted an advanced degree in Business Administration (Wheeler, 1967). Of the 927 colleges and universities identified, 665 of these offered a master's degree ("Online Business Schools," 2008). At the doctoral level, from 1961 through 2000, the number of institutions offering doctoral degrees increased from 31 to 131 (Doctoral Faculty Commission, 2003). This increase in institutions offering advanced degrees in Business Administration, coupled with increased faculty retirements, have led to numerous issues being faced by these institutions. One of the issues is finding enough academically-qualified faculty members.

Research by the Doctoral Faculty Commission (2003) showed that in 2001 only 396 of the 1,123 newly conferred business doctorates (35%) planned to enter academia. While that same year, 752 current doctoral-prepared faculty members retired. This ratio is expected to remain the same through the year 2012 (Doctoral Faculty Commission, 2003).

With increasing business school faculty member retirements, a decrease in the production of business doctoral degrees, and an ever-increasing number of schools

offering MBA programs, an identified need exists for additional academically-qualified faculty members. According to the Doctoral Faculty Commission (2003), a shortage of at least 2,400 and possibly as many as 5,700 doctoral faculty will emerge in 2012. The AACSB identifies two categories of doctoral-prepared faculty: academically-qualified and professionally-qualified. The basic differences in the two categories are that academically-qualified faculty members have a doctoral degree in the faculty member's teaching area. The professionally-qualified faculty member must hold at least a master's degree or a doctoral degree in any field (AACSB International, 2006a, 2006b).

Research indicates that business undergraduate majors are least likely to attend graduate school among all majors and subsequently are less likely to enroll in doctoral programs (Zhang, 2005). Additionally, Felbinger, Holzer, and White (1999) suggest that only a handful of students are interested in pursuing traditional careers involving research, teaching, and service. Without finding a new source of doctoral students, faculty recruitment and retention will continue to be a chronic problem for business schools.

According to the Council of Graduate Schools (2007), doctoral applications in business were 15,705, while the business schools themselves accepted 2,849 doctoral applications, an 18% rate, and the lowest percentage of all degree programs. For those who enrolled in doctoral programs, fewer than 1 in 10 obtained a doctorate (Zhang, 2005).

Another factor contributing to the faculty shortage in Business Administration is the increasing time to completion. The time to completion of the doctoral degree has increased from four to five years in 1988 to eight years in 2007 (Council of Graduate

Schools, 2007; Ferrer de Valero, 2001; Garcia, Malott, & Brethower, 1988). This increased time to completion, coupled with the large attrition rate and limited program entry, have created a doctoral-prepared faculty shortage in the nation's business schools.

Currently, no AACSB accredited on-line doctoral degree programs exist (AACSB International, 2008). Some business schools have blended programs (traditional classes on campus coupled with some distance learning), but the blended programs do not seem to offer the flexibility needed to address the current faculty shortage. Blended programs offer a greater degree of flexibility than traditional programs, but many blended programs require days or weeks of campus attendance throughout the semester. Therefore, even if a student could gain entry into a blended program, the campus attendance requirements often make this type of program unattractive to students who are not geographically located near the program's campus (Ghezzi, 2007).

The Doctoral Faculty Commission (2003), in an internally commissioned report to the Board of Directors of AACSB, suggested that:

> The AACSB needs to Foster Innovation in Ph.D. Delivery. Specifically mechanisms that increase cooperation among schools engaged in Ph.D. education should be encouraged. Consortia where schools pool faculty or other resources can increase the number of students served while concurrently reducing costs. Custom programs delivered by well-established doctoral faculties also might provide a viable option for schools that lack the research traditions required for doctoral education. Technology can be utilized to expand the breadth and quality of program offerings, concurrently lowering the costs of delivery of small Ph.D. programs. Results could include reduced attrition and shortened time to degree. (p. 4)

In an attempt to aid in the identification of a possible solution to the impending faculty shortage, a concept program was developed by the researcher, with the help of the Dean of a Business School at a Midwestern university, for a new and innovative program

to produce academically-qualified faculty members. The concept program, the PAT (Professionally-Qualified to Academically-Qualified to Tenure) Doctor of Business Administration program (Appendix A), was developed to address the main causes listed by universities and students as the reasons for decreased doctoral production. The researcher studied the curriculum of both traditional (brick and mortar) and non-traditional (on-line) doctoral granting universities in determining the course selection necessary to produce a valid program.

At traditional (brick and mortar) institutions, the researcher examined doctoral programs in business schools at many of the AACSB accredited universities. The programs were examined for course requirements, program structure, delivery methods, and educational philosophies. After a thorough examination of numerous programs, the PAT concept program emerged by modeling program structure from the Ph.D. in Strategic Management at Florida State University and other high-quality distance-learning structures of accredited business programs in existence at Florida State University, and combined it with the educational philosophy espoused by the University of Miami School of Business.

The course sequence and timeline of the Ph.D. in Strategic Management at Florida State University was modified to make it possible for a candidate to complete the degree in three years. As stated by Florida State University (2008b),

> [One of] the defining features of the Strategic Management Doctoral Program . . . [is the] coordinated research structure. . . . Unlike many Strategy programs, research requirements and expectations are built into the entire program. . . . This permits a building of research skills and accomplishments well before the student reaches the dissertation stage. The intent is to make the dissertation research less daunting and more meaningful for the student. (para. 1)

As part of the design process for the proposed PAT concept program, the on-line structure was modeled after accredited programs in the College of Business at Florida State University. The College of Business describes their programs as:

> Uniquely designed with the busy, working professional in mind. . . . Online program students can attend class from anywhere in the world due to the high-quality distance-learning structure that features a 100-percent online interface that has the same standards, core courses and professors as the on-campus, face-to-face MBA programs. Through regular interactions with knowledgeable professors and classmates, who are also experienced professionals, the . . . [program] will help you move to the next level personally and professionally. . . . (Florida State University, 2008a, para. 1)

Graduates who have several completed research projects when entering the academic job market are more attractive to academic institutions, as can be witnessed in many position opening announcements published by universities seeking faculty members. At AACSB accredited universities, the educational philosophy is designed to prepare students for modern realities of research and placement in academic departments at business schools. An example of this educational philosophy is provided by the University of Miami. To foster this philosophy,

> Students will begin partnering with faculty immediately upon entering the program, with a one-on-one mentoring model continuing for duration of the program. The program requires year-round, full-time study in order to maximize interaction between faculty and students. Upon completion of this program, students will be prepared to enter the academic job market. The goal of the PhD program is to prepare students for a career of original research. In consequence, the most important requirement is the completion of doctoral thesis under close faculty supervision. Advanced coursework and seminars provide the student with the rigorous methodological foundation and knowledge of the field necessary to conduct novel creative research. Starting from their first year in the program, students will do collaborative research with faculty whose expertise matches their interest. This will provide them with the hands-on training necessary to conduct independent research in the dissertation stage of their doctoral program and in their subsequent career as scholars. (University of Miami, 2008, para. 3)

The structure of the proposed PAT concept program of study was devised after examining existing programs at Florida State University and the educational philosophy

at the University of Miami. The proposed PAT concept program of study requires 60 graduate credits beyond the master's degree distributed as follows: 12 credit hours in research methods, 33 credit hours in core courses, 3 credit hours of comprehensive exams, 12 credit hours of dissertation. This structure models the description of the Council of Graduate Schools (2007) doctoral program in that it contains a "period of didactic coursework, often two years in length. The student then sits for qualifying or preliminary exams that test the mastery of the field and the readiness to undertake a doctoral dissertation" (pp. 27-28).

The PAT concept incorporates courses already developed and in use at traditional universities (accredited institutions). It also incorporates on-line delivery methods in use at non-traditional universities and universities that have accredited on-line programs. The construction of the PAT concept was also supported by the latest literature on mentoring and instructional delivery.

The main difference between programs already in existence, such as those at Florida State University and the PAT concept program, is mentoring. One of the strengths associated with the PAT program is the structured mentoring process. Unlike many universities where mentoring may happen between student and advisor, the PAT program fosters a mentoring relationship. This relationship should naturally occur within the department at the university where the student is employed as a faculty member. As a new faculty member hired as professionally-qualified is immersed inside a department with academically-qualified members, mentoring should be encouraged to enhance departmental effectiveness and efficiency. Additionally, two courses in the program require the mentoring relationship to occur. The course description and expectation is that

the learner will conduct a research study which relates to a fundamental business administration topic and culminate with a formal project report with the oversight of a local departmental mentor.

The proposed concept program may aid in expanding the academically-qualified faculty available to colleges and universities. Universities have identified that with too few faculty members available to teach at the doctoral level, they have to limit the number of doctoral programs offered (Doctoral Faculty Commission, 2003). The limited number of doctoral programs offered, in turn, limits the number of students who can be admitted into these programs. Historically, programs typically receive between 10 and 50 applications for every one admitted (Goodyear, 1997). Thus, a continual shortage exists, because demand exceeds production of doctoral-prepared faculty.

The Doctoral Faculty Commission (2003) reports that 86% of AACSB accredited US institutions limit the number of students accepted into doctoral programs. Of those, 92% report that they limit enrollment because of cost of financial support for doctoral students. Additionally, when asked what would cause them to increase the number of doctoral students admitted to their programs, the three primary reasons identified were (a) external funding available to support doctoral students (67%), (b) better financial situation for the business school as a whole (64%), and (c) larger pool of research faculty (63%). According to the Doctoral Faculty Commission report,

> A survey of US program directors and deans suggests that about 80 percent of funding for doctoral programs derives from business schools' own resources. Endowments and university sources, such as fellowships and assistantships, constitute the remainder. Federal and corporate funding supports only a small fraction of the costs. Additionally, four out of every five of the largest doctoral producers are in public institutions, which will face repeated budget contraction and rescission [*sic*]. (p. 2)

The Doctoral Faculty Commission (2003) also commissioned a survey of student attendees at the 2003 Beta Gamma Sigma Leadership Conference. Current business students were asked about their plans for advanced degrees. Three percent indicated they planned to enroll in a doctoral program immediately after graduation, while 18% indicated that sometime in their career they might like to pursue a doctoral degree. These numbers are consistent with data collected by other means of research as well (Snyder, 2003; Zhang, 2005). The overwhelming responses to the factors in determining whether to pursue a business doctorate were (a) monetary cost of program (76.7%), (b) ability to support oneself and family while studying (81.6%), and (c) time required to complete degree (66.7%) (Doctoral Faculty Commission, 2003). These factors are not new, nor are they just related to business schools. Financing has been identified as a factor by Berg and Ferber (1983), Billingsley (1982), and Kluever (1997). In addition, completion time has been identified by Dorn, Papalewis, and Brown (1995), Ghezzi (2007), Jacobs and King (2002), and Scott, Burns, and Cooney (1998).

The AACSB has determined that an industry-wide marketing program should be developed to educate constituents about the advantages and attractiveness of academic careers in business. Furthermore, marketing should target high potential groups (Doctoral Faculty Commission, 2003). One such high potential group that might benefit from an improved marketing campaign is retirement-eligible Air Force commanders. The retirement-eligible Air Force commanders are highly qualified; many have multiple master's degrees and at least five years of leadership experience. For purposes of this study, retirement-eligible commanders are defined as those who are within one year of

completing 20 years of active duty in the military and who are currently serving in the capacity of squadron, group, or wing commander.

This study was conducted to determine if retirement-eligible Air Force commanders would be a good fit for and be willing to enroll in this concept program. In order to become a commander in the United States Air Force, each officer must volunteer for this duty. In addition to volunteering for the position, the career records and academic credentials of the volunteers are screened by a board of five General Officers. The potential candidates all have at least one master's degree and have served as an instructor in some capacity during their career. The experiences of these Air Force commanders indicate that they may have the academic and professional experience to be considered professionally-qualified by AACSB standards (i.e., they are qualified by their work experience to be hired as non-tenure track Assistant Professors), and that they would make a potentially good fit for the proposed PAT concept program.

Statement of the Problem

Based on the current production level of doctoral degrees in business, a chronic shortage of academically-qualified faculty members will exist for the foreseeable future. This study examined the likelihood that retirement-eligible Air Force commanders would be a good fit for and enroll in the concept (PAT) program, thus helping reduce a chronic shortage of doctoral-prepared faculty members in business schools.

Purpose of the Study

The purpose of this study was to investigate if retirement-eligible Air Force commanders would be a good fit for this new concept program and determine if they would be interested in enrolling in this new concept program. By assessing the interest

and fit, these highly motivated, proven leaders may be a source of students who will become additional doctoral-prepared faculty members. Each year, approximately 150 commanders nationwide retire from the USAF (Air Force Personnel Center, 2008). These retirement-eligible commanders are potential faculty members who might enroll in an innovative doctoral program that would allow them to transition from being professionally-qualified faculty members to become academically-qualified, as defined by the AACSB.

Theoretical Framework

The PAT concept program is specifically designed to meet the needs of both business schools and potential doctoral students. The PAT concept addresses the issues identified by students as entry barriers: (a) monetary cost of program, (b) ability to support oneself and family while studying, and (c) time required to complete degree (Doctoral Faculty Commission, 2003). Research (Rocha-Singh, 1994) identified three dimensions of stressors (academic, environmental, and family/monetary) which were supported by Nonis, Hudson, Logan, and Ford (1998) for most graduate students.

To counteract the barriers of monetary cost of the program and the ability to support self/family while in the program, the PAT concept program requires the student to be hired at a participating institution as a professionally-qualified instructor, in the rank of non-tenure track Assistant Professor. The PAT concept program sets the pay for this position at approximately $40,000 annually. This salary is approximately $20,000 a year less than the average starting salary of a doctoral-prepared Assistant Professor ("Gap Persists," 2008). This salary, coupled with the retirement pay received by the candidate, allow for a financial situation better than the typical graduate student. This pay plan

should allow the student to easily cover the cost of the PAT concept program, which presently is $3,600 in tuition, approximately $300 in books, and $100 in fees, for a total of $4,000 per semester. Additionally, the pay plan may alleviate the concern with the ability to support oneself and family while in the program.

According to a pilot study consisting of 144 Air Force Reserve Officer Training Corps (AFROTC) commanders conducted by the researcher at the 2007 AFROTC Commanders Conference, AFROTC commanders identified that too much of their time would be required to complete a doctoral degree in their current employment situation (Williams, 2008). Unlike other academic professionals, military commanders are on duty and responsible for their students 24 hours a day. This added burden placed on military commanders often requires sacrificing time with family members or leisure time that is afforded to civilian faculty. Of the respondents, 88% agreed that their current workload was too large to accommodate any time for attaining a doctoral degree, 81% agreed that they would have to sacrifice too much of their time with families, and 68% agreed that they would have to sacrifice too much of their leisure time to pursue a doctoral degree while on active duty. To overcome the time burden placed on active duty military members, the PAT program was designed for post active duty enrollment.

As the doctoral degree completion times increase throughout the country, the PAT concept program is designed to be completed in three years, thus counteracting the trend of increasing completion times. The three-year completion time keeps the students involved with their studies throughout the academic year, thus maintaining academic momentum. The required course load per semester to complete in three years is three (3-credit) courses per semester. This credit load is considered full-time status and is

coupled with the required teaching load of the PAT concept program of three (3-credit) courses taught per semester. This load would possibly allow for work, research, studies, and time for family.

The PAT concept also addresses the issues identified by students as completion barriers: (a) mentoring, (b) availability of program, and (c) ability to support oneself and family while studying (Doctoral Faculty Commission, 2003). Mentoring is identified as a barrier to completion of doctoral programs by potential and current students (Bullough & Draper, 2004; Paglis, Green, & Bauer, 2006; Rose, 2005). This program is designed to foster mentoring by requiring the completion of two research projects with the student's local mentor. The two research project courses are included in the curriculum to foster academic and scholarly growth of the student by working directly with a tenured professor at the university where the student is employed. Not only do these courses teach how to conduct research, the class projects are completed with the idea of creating publishable products. The student is thus mentored in how to actively participate in scholarly activities. Working closely with this mentor also enhances collegiality, another important aspect of the professoriate.

The PAT concept program was designed to address the identified completion barrier of availability of program by allowing the student to work at a local institution while completing the degree requirements. According to AACSB International (2008), only 127 accredited doctoral business programs exist around the nation, thus limiting the doctoral programs available for entry. The PAT concept would allow a student to work at almost any university, whether it has a doctoral program or not, and be enrolled in a doctoral program. The on-line delivery method would allow the program to be available

to students in many more colleges and universities, while still maintaining strict AACSB accreditation standards. The program does not lessen the requirements for the doctoral degree, yet makes it available at more colleges and universities around the country.

The rationale for overcoming the ability to support oneself and family while studying is very similar to the barriers to entry. To counteract the barrier of the ability to support self/family while in the program, the PAT concept program requires the student to be hired at a participating institution as a professionally-qualified faculty member, in the rank of non-tenure track Assistant Professor. The PAT concept program identifies the pay for this position at approximately $40,000 annually. This salary, coupled with the retirement pay received, allow for a financial situation that is better than the typical graduate student.

As noted previously, the barriers identified by potential doctoral students and the AFROTC commanders are ameliorated by the specific aspects of the program. After analysis of the data gathered from the AFROTC commanders, the majority of AFROTC commanders wanted to continue teaching at the university level (Williams, 2008). If the AFROTC commanders were a representative sample of the overall Air Force commander desires toward teaching and research, then many Air Force commanders should be interested in a faculty position as a second career. If the Air Force commanders were interested in a second career in academia, they would be a good fit for this program because they have the experience necessary to succeed in what they do, they have the desire to continue their educational growth, and they have the proven motivation to complete what they start. Additionally, the proposed PAT concept program was constructed to help ensure that poorly qualified students are not admitted. The

retirement-eligible commanders have at least one master's degree, which has been shown to be a good indicator of academic ability. While an earned master's degree does not prove the ability to conduct research, it is an indicator of having the capability to conduct research. Additionally, these commanders have the time-management and organizational skills necessary to successfully complete the program. When poorly qualified students are admitted into academic programs, this misuses resources and weakens the field (Kuncel, Hezlett, & Ones, 2001).

Research Hypothesis/Research Questions

The purpose of this study was to assess the fit and interest of retirement-eligible Air Force commanders for this concept program. The working hypothesis for this study was that retirement-eligible Air Force commanders would be a good fit for and interested in enrolling in the proposed PAT concept program.

Research questions to be addressed were:

1. Would retirement-eligible Air Force commanders be interested in the PAT program?
2. Would retirement-eligible Lieutenant Colonels be interested in the PAT program?
3. Would retirement-eligible Colonels be interested in the PAT program?
4. Would retirement-eligible commanders be a good fit based on overcoming the following two entry barriers to doctoral programs:
   a. Monetary cost of program
   b. Time required to complete degree?

5. Would retirement-eligible commanders be a good fit based on overcoming the following three completion barriers to doctoral programs:
   c. Ability to work with a mentor
   d. Availability of program
   e. Ability to support self/family?
6. Were Lieutenant Colonels interested in teaching a better fit for the PAT program than Colonels interested in teaching based on the five constructs of:
   a. Monetary cost of program
   b. Time required to complete degree
   c. Ability to work with a mentor
   d. Availability of program
   e. Ability to support self/family?

Importance of the Study

"The future of any academic discipline is dependent upon the supply of new scholars entering its ranks" (Wheeler, 1967, p. 35). A unique opportunity is now arising to enrich the preparation of those who aspire to the professoriate. One of the reasons is that a significant generational change in the faculties of the nation's colleges and universities is currently taking place (Austin, 2002). Large numbers of faculty members were hired in the 1960s and 1970s as the "baby boom" generation entered college in record numbers. Those faculty and many hired since are now retirement-eligible. The United States had 1,344,000 postsecondary faculty in 2000 and will need an estimated 682,000 new faculty by 2010 to respond to an unprecedented number of retirements and to accommodate projected enrollment growth (Hecker, 2004). If business schools are

going to be able to keep ahead of retirements, they must find innovative ways to attract and prepare additional faculty members with doctorates.

Scope of the Study

This study was conducted using a convenience sample of 42 current Air Force commanders. Each commander surveyed was either a Lieutenant Colonel or Colonel. These commanders are currently serving around the world in the United States Air Force. Most commanders in the United States Air Force are squadron commanders. A squadron is comprised of anywhere between 25 to 1,000+ military members. A group is comprised of approximately eight squadrons, and a wing is comprised of approximately four groups. The Lieutenant Colonels surveyed are commanders at the squadron level. The Colonels surveyed are either group commanders or wing commanders.

Definition of Terms

The two categories of doctoral-prepared faculty members used in accreditation are defined as:

Academically Qualified (AQ): "Normally, the academic preparation expected for AQ faculty members is a research doctorate . . . or the equivalent **and** sustained development activities to demonstrate currency in the faculty member's teaching field" (AACSB International, 2006a, p. 11).

Professionally Qualified (PQ): "Consistent with the current standards PQ faculty must meet the following qualifications" (AACSB International, 2006b, p. 3):

1. In most cases, possess at least a masters degree (or equivalent qualification) in a discipline or field related to the area of teaching responsibilities;

2. Professional experience at the time of hiring that is significant in duration and level of responsibility and consistent with the area of teaching responsibilities; and

3. Continuous development activities that demonstrate the maintenance of intellectual capital (or currency in the teaching field) consistent with the teaching responsibilities. (p. 3)

Summary

Unless decisive action is taken to reverse declines in business doctoral education, academic business schools, universities, and society will be faced with an inevitable shortage of faculty members (Doctoral Faculty Commission, 2003). The current situation can best be described as a doctoral-prepared faculty shortage that is getting worse every year, with no solution in sight. Declining university budgets, coupled with increasing faculty retirements, limit the number of students that can be admitted into doctoral programs. Even with decreasing numbers of doctoral graduates, there has been a steady increase in the number of colleges and universities adding master's degrees in business, which has created an issue that must be addressed in order to sustain the academic faculty requirements of colleges and universities.

To help meet this challenge, the concept for a new and innovative doctoral program was proposed to help ease the current situation. The program was developed to counteract identified barriers to entry and completion of a doctoral degree. Additionally, it may provide some immediate relief to universities, without a doctoral degree in business, by providing them with a professionally-qualified instructor who is progressing toward being academically qualified.

The target audience of this new and innovative program was retirement-eligible Air Force commanders. For the most part, this target audience has the proven skills,

academic credentials, and motivation necessary to complete this program. Most of these commanders have the tools necessary to enter into this new program, successfully complete their doctoral degree, and enter into academe.

CHAPTER II

LITERATURE REVIEW

"The traditional purpose of doctoral education is the creation of a new generation of scholars who will pursue careers in academe" (Felbinger et al., 1999, p. 459). A concept program must examine many aspects of the educational process to ensure the important components of doctoral preparation are achieved. During the construction of the PAT program, the following areas were identified as important components of a successful program: doctoral preparation, on-line delivery, mentoring and socialization, finances, time to degree and dissertation completion, and motivation and persistence.

Doctoral Preparation

In schools of business at colleges and universities around the country, more and more students are competing for fewer and fewer seats. This demand has led administrators to seek additional doctoral-prepared faculty members to provide instruction in their schools. Among business programs, two distinct levels of the doctoral degree exist: the Doctor of Philosophy (Ph.D.) and the professional doctorate such as the Doctor of Business Administration (D.B.A.).

The National Center for Education Statistics (2006) reported guidelines for doctoral degrees in the Integrated Postsecondary Education Data System:

> Doctor's degree—research/scholarship—A Ph.D. or other doctor's degree that requires advanced work beyond the master's level, including the preparation and defense of a dissertation based on original research, or the planning and execution of an original project demonstrating substantial artistic or scholarly achievement.

> Some examples of this type of degree may include Ed.D., . . ., D.B.A., D.Sc., . . ., and others, as designated by the awarding institution. (p. 543)

The Ph.D. is the highest academic degree granted and is considered a terminal degree. The Ph.D. is awarded by faculty stewards of the discipline to those who have demonstrated the highest level of mastery of the intellectual principles of their chosen professions. Through research and scholarship, recipients of the Ph.D. have demonstrated their ability to apply those principles to create original contributions that expand the knowledge in the field (Council of Graduate Schools, 2005). "The candidate has to show that they have understood and critically assessed all the main issues, especially the theoretical ones, in the field of study" (Remenyi, Money, Price, & Bannister, 2003, p. 106).

In the *Task Force Report on the Professional Doctorate*, the Council of Graduate Schools (2007) stated that "a professional doctorate is not a Ph.D." (p. 5). The focus of the professional doctorate is to provide professional training or focus on applied research, rather than on basic research which expands the knowledge base of a field (Council of Graduate Schools, 2007). Professional doctoral degrees typically attract those with professional experience, usually within management, with several years' professional experience, often at the senior level (Neumann, 2005).

Within the levels of doctorates, "the principal differences lie in the nature of the coursework and the nature of the capstone experience" (Council of Graduate Schools, 2007, p. 27). With either degree, the level of instruction and the emphasis on research will be the same, according to Neumann (2005): "The standard and expectation of the

research is argued to be equivalent" (p. 183). Either type of degree might fill the current void of academically-qualified professors at business schools across the United States.

On-line Delivery

According to Ghezzi (2007), the idea of distance learning in higher education occurred prior to the Internet revolution. Distance education began to emerge when universities realized that potential students were focused on their careers and their families and were unwilling to spend many years on campus to complete an advanced degree. Many factors such as cost, location, and distance from permanent address have an effect on enrollment in graduate programs (Bures, Abrami, & Amundsen, 2000; Johanson, 2005; Kallio, 1995). Additionally, with limited numbers of academically-qualified professors, fewer opportunities emerge to attend a university that grants a doctoral degree. These fewer opportunities equate to fewer doctoral-prepared faculty members in the future; this, in turn, causes fewer schools to be able to offer doctoral programs, ultimately perpetuating the faculty shortage. One way to break this cycle is through the use of modern technology, specifically the Internet, to increase the educational opportunities available to those who would like to pursue a doctoral degree. Wang and Newlin (2000) suggested that new information infrastructure can facilitate distance learning for many off-campus students and can foster collaboration between academic institutions and for-profit entrepreneurs. On-line education can accommodate student demand for doctoral education in ways that are campus-independent and can transform higher education into student-centered learning (Baer, 1998).

On-line classes are considered the future wave of education. Increased availability of computer technology and acceptance of adult on-line professional degrees have

fostered this attitude (Irizarry 2002). Because of the limited availability of traditional doctoral programs and the fact that many students are practicing professionals who are place-bound or time-bound, or both, "professional doctoral programs are particularly adaptable to full or partial on-line delivery" (Council of Graduate Schools, 2007, p. 30). However, as Sherry (1996) described, on-line learning should be directed toward the needs of the students and not just on inclusion of technology within the learning process.

The typical on-line learners are working adults with busy professional, familial, and social lives. Campbell (1999) described on-line learners as adults who have arrived at a stage in life where they are responsible for their well-being and can execute self-directed activities. This coincided with Thompson's (1998) findings, which stated that adult distant learners are older, more mature, married, and employed. Additional characteristics of on-line learners are that they might be critical thinkers who accept responsibility for their own learning, are organized, and have support from their families (Council of Graduate Schools, 2007; Ghezzi, 2007; Irizarry, 2002; Kearsley, 2002; Sherry, 1996).

With a review of the characteristics of on-line learners, the question becomes: Where can students who might have these characteristics be found? In response to this question, the researcher considers that retirement-eligible Air Force commanders might have most, if not all, of the characteristics associated with on-line learners.

Web-based education provides learners with the opportunity to maintain their lifestyle, interact with other students from remote places, plan a study schedule around other activities, cut down on travel, have more time to search for resources, and benefit from an array of ideas from diverse faculty. The ideal learning experience for a diverse

group of students combines the academic experiences and the educational facilitation of an experienced professor (Irizarry, 2002). On-line education differs from traditional education in that individuals are solely responsible for their own learning. The majority of on-line adult learners are part-time students who must balance their work, their family, and their social lives to complete their doctoral degree. Given these multiple demands, there is a much higher (approximately 50%) dropout rate among these students (Ivankova & Stick, 2007).

Some academic institutions or accreditation bodies, such as the AACSB, have not fully embraced on-line doctoral programs. Many arguments support on-line education, from increasing enrollment without a proportional increase in university resources to releasing up instructor time for additional research opportunities. Unfortunately, the argument that distance education could allow more time for faculty interaction with students has not changed traditional teaching patterns or on-line acceptance (Baer, 1998). In fact, "a few academic institutions, spurred by vision or crisis, may have sought to reorient instruction toward student-centered learning with heavy use of Internet-based courseware, discussion groups, and links to other on-line resources" (Baer, 1998, p. 17). At the traditional university, academic leaders are adapting to meet the demands of the consumers who seek convenience and flexibility (Ghezzi, 2007).

Baer (1998) found no significant differences in student learning for courses taught in traditional classrooms as compared to courses taught on-line. The difference that did appear was in student motivation. "It takes more motivation to pursue classes on one's own than in a group setting, and thus completion rates can be much lower for on-line learning than for traditional classroom courses" (p. 6). The lifestyles and work histories

of the target population for this study of motivated self-starters could ameliorate the lower completion rates.

Students expect a lot from a program, given the time and money that they invest in their education. The central ingredient of an on-line program must be a well-targeted curriculum that provides research skills and enhances academic knowledge (Kearsley, 2002). Institutions providing on-line learning often incorporate faculty-student and group discussions via telephone, audio or videoconferencing, or face-to-face meetings. While many advantages to on-line programs accrue, still some disadvantages exist.

On-line learning is less effective than time spent on campus in helping students exploit academic relationships, networking, and mentorship (Baer, 1998). Students also concede that while they might prefer a more traditional academic experience on a university campus, the factors of time, distance, and family obligations make it almost impossible to do so. On-line courses align with a modern lifestyle; students can send an e-mail to their professor instead of having to worry about how they will make it to the professor's office hours (Ghezzi, 2007). With a robust curriculum, professors willing to embrace current technology and students with a strong desire to succeed, on-line education could change the trend of an academically-qualified faculty shortage.

Mentoring and Socialization

A mentoring relationship can be described as a relationship in which someone wiser and with more experience providing advice, guidance, and support to someone with less experience (Baird, 1997; Bullough & Draper, 2004). It has been shown that mentoring is an important process that aids in the completion of the doctoral degree, and one of the most important relationships students may have in their academic career is

with their advisor/mentor (Cuny & Aspray, 2002; Di Pierro, 2007; Gardner & Barnes, 2007). Academic mentors serve as advocates for their students, include them in research projects, aid them through their academic journey, and provide encouragement when needed (Pruitt & Isaac, 1985; Zeek, Foote, & Walker, 2001). Additionally, students report that having supportive and encouraging advisors enhanced their learning experience and facilitated degree completion (Katz, 1997; Luna & Cullen, 1998).

A strong correlate of success in graduate school is shown to occur when faculty interaction with students exists in a department. In their survey of business school deans, Srinivasan, Kemelgor, and Johnson (2000) confirmed from an administrator's perspective that the relationship between faculty interaction and student success existed. It is not just the amount of contact that matters; it is also the quality of that contact that enables successful completion of the degree. The amount of the time spent together leads to an informal and emotional link which extends beyond the student/mentor experience between student and advisor (Isaac, Quinlan, & Walker, 1992). Krefting (2003) found that the relationship between student and mentor often led to academic strategies being formed and culminated with career help. Students who had positive interactions with their mentor felt more confident in their ability to complete their degree (Santiago & Einarson, 1998). Garcia et al. (1988) report that of the students who fail to complete a degree program, more than 25% occur after coursework has been completed. With a good mentoring relationship, this number could be reduced. To be effective in the mentoring process, mentors must clearly communicate with graduate students and provide honest feedback (Rose, 2005).

Through role modeling (Paglis et al., 2006), mentors demonstrate productive work habits and attitudes, which provide mentees with an example from which to define their own working styles. They also found that sharing their own experiences in working through the frustrations and challenges of academic studies aided in student perseverance and fostered student resilience.

As anyone who completed a doctoral degree can attest, the doctoral experience begins with a very structured first few years of coursework and progresses to a less structured experience during the dissertation research process (Katz, 1997). Without the guidance of a mentor, this process can be daunting, as many students report that the dissertation process is overwhelming. Mentors help graduate students select manageable topics, limit the scope of the research, enhance time-management skills, and encourage degree completion (Council of Graduate Schools, 2005).

One outcome of the mentoring process is to help students contact other faculty members and members of the profession outside academia (Paglis et al., 2006). The contacts outside of academia can promote the mentees' career, through increased exposure and visibility (Rose, 2005). Additionally, academe has utilized mentoring to attract, retain, and promote faculty members (Luna & Cullen, 1998). Gardner and Barnes (2007) found that a great deal of a student's encouragement to become faculty members was fostered by their mentors.

Mentoring is often used as the primary means to educate graduate students and is a relevant concern for universities as they try to attract the next generation of faculty members (Roberts & Sprague, 1995; Rose, 2005). A large percentage of current faculty members cite their graduate school mentor as being "very influential" in their decision to

enter the professoriate (Lindholm, 2004). Austin (2002) noted that many graduate students believed that they did not receive enough guidance about the tasks, other than teaching, that a faculty member must perform to include advising, committee work, curriculum development, and service. This understanding has led to the realization that the faculty orientation begins in graduate school and not with the first faculty position (Austin, 2002). Universities are recognizing that to retain students and faculty members, they should encourage a sense of collegiality that helps promote the mission of education while individual scholarly interests are pursued (Heathcott, 2007). In doing so, graduate students may be better able to understand the career that they may undertake, while faculty members get the benefit of advancing their research interests and the joy of knowing that they have prepared their students for successful careers (Heathcott, 2007; Mitchell, 2007).

Financial Concerns

As potential students decide whether to enroll in a doctoral program, two main financial concerns arise. The first financial issue is the actual costs (tuition, fees, and books) of the program. The second financial concern is the ability of students to support themselves and their family while in school. Additionally, research shows that students decide about doctoral degree enrollment based on an assessment of the benefits and costs of enrollment (Jantzen, 2000; Montgomery & Powell, 2006; Perna, 2004).

With budget deficits at the national and state level, the share of college costs financed by the federal and state governments has fallen. For public institutions, government spending has been declining for more than a decade. At private institutions,

federal funding has declined to its lowest level since the late 1950s (Britt, 2007; McPherson & Schapiro, 1996).

During the last decade, universities have seen a slight increase in the contribution of gifts and endowments, but the increases have not been large enough to offset the governmental decreases. The only way universities are able to recoup the difference is through tuition increases. These tuition increases have caused heightened concern about how to finance a doctoral degree (McPherson & Schapiro, 1996).

Tuition increases often result in students having to deplete their savings and/or take on additional debt, usually in the form of student loans. In 2005, the median amount borrowed by doctoral students was $44,733 (American Council on Education, 2005). The potential to accumulate such a large debt has an adverse effect on graduate school enrollments. A study of 2,000 borrowers in 1998 by Baum and Schwartz, as cited in Millet (2003), found that 35% of the people who decided not to go to graduate school indicated that concern over borrowing was "very or extremely important" in their decision. It has been shown that enrollment is negatively affected by tuition costs, especially among minorities (Hirt & Muffo, 1998; Jantzen, 2000; Lang, 1992).

Just as the potential to exhaust personal savings and incur debt is detrimental to enrollments, research shows that receiving financial aid has a strong positive influence on graduate school enrollment (Millet, 2003). Students select universities to attend based on net costs (tuition costs minus financial aid) of program completion (Brewer, Eide, & Ehrenberg, 1999).

Tuition is commonly referred to as the explicit cost of pursuing a graduate degree. An implicit cost of lost earnings while attending school also exists. Implicit costs are

commonly called the opportunity cost of obtaining a degree (Baker, 1998; Jantzen, 2000; Montgomery & Powell, 2006).

Research (Baker, 1998; Jantzen, 2000) found that the key element in opportunity cost is the income foregone through lost earnings. They identified several ways in which going to graduate school reduces earnings. The first is the difficulty of full-time employment and a full-time student academic course load. Roughly 51% of all graduate students are enrolled part-time in their degree program (Chitty, 2006). Part-time students still have opportunity costs in that more time devoted to their job could translate into promotion and pay raise opportunities (Jantzen, 2000; Montgomery & Powell, 2006).

Using the U.S. Department of Education, National Center for Education Statistics, Baccalaureate and Beyond Longitudinal Study of 1996, Millett (2003) determined:

> The odds of students with total incomes of $24,999 or less enrolling in a graduate or first professional program were 2.4 times lower than those of their peers. Students with total incomes ranging from $25,000 to $49,999 were 2.1 times less likely to enroll in a graduate or first professional program than their peers. Students with total incomes ranging from $50,000 to $74,999 were 2 times less likely to enroll in a graduate or first professional program than their peers.
>
> Students with foregone incomes of $21,000 or less were 1.6 times less likely to enroll in a graduate or first professional program than their peers. Students with foregone incomes of $21,000 to $23,999 were 1.5 times less likely to enroll in a graduate or first professional program than their peers. (pp. 409-410)
>
> On the basis of this research, students with relatively high foregone income can be less likely to apply or less likely to enroll in graduate or professional school than students with comparatively low foregone incomes. (p. 418)

The statistics provided by Millett (2003) show that potential students are concerned with their ability to support themselves and their families enough to consider not enrolling in doctoral programs. To aid in the reduction of these concerns and to prevent future doctoral-prepared faculty shortages, increased federal, foundation, and/or

corporate funding for graduate students should be sought. Such funding would reduce the personal costs of doctoral study and thus should increase the number of students willing to undertake doctoral graduate study (Ehrenberg & Mavros, 1995; Hirt & Muffo, 1998).

Time to Degree and Dissertation Completion

In interviews with students who had not completed their degrees, financial problems, demands of work and family, discontentment with advisors, and personal concerns were cited as reasons for failing to complete the dissertation (Hirt & Muffo, 1998; Kluever, 1997). To help eliminate the ever-increasing doctoral faculty shortage, a thorough examination of the degree process should occur. In conducting such an examination, one would undoubtedly discover that time to completion and attrition rate are increasing in doctoral programs. The median time spent enrolled as a graduate student has increased to eight years, according to the Council of Graduate Schools (2007).

With the high cost of graduate education, it is disconcerting that so many doctoral students fail to complete the requirements to obtain their degree. Studies conducted to determine what causes high attrition and increased time to completion have found that programs with high completion rates are often those in which students take relatively short times to earn their degree (Di Pierro, 2007; Ferrer de Valero, 2001). National rates of doctoral student attrition are difficult to calculate due to longer completion times. When the average completion time exceeds the typical length of course validation time, usually five years, attrition rates become harder to calculate. Additionally, when the completion time extends past the acceptable program completion period, usually seven years, attrition rates are also harder to calculate. The reported attrition rates vary widely,

but tend to average between 40% and 50% (Dorn et al., 1995; Ivankova & Stick, 2007; Lovitts, 2000).

Approximately 50% of those who drop out of doctoral programs do so within their first two years of graduate school (Ehrenberg & Mavros, 1995). A study conducted by Bowen and Rudenstine, as cited in Allan and Dory (2001), showed that over 40% of all students who enter doctoral programs drop out, and 25% of those students do so after completing their courses and prior to dissertation defense. Some of this high attrition can be attributed to the students, in that they sometimes do not fully understand the substantial amounts of aptitude, time, and work effort demanded by doctoral programs (Grove, Dutkowsky, & Grodner, 2007).

Universities with high attrition rates waste valuable resources, such as individual faculty time and effort as well as departmental and institutional resources (Allan & Dory, 2001). The wasted resources might have been used more productively for other purposes, such as increased time spent on research conducted by faculty members or on mentoring and directing other students.

Regular supervision is strongly associated with successful completion (Seagram, Gould, & Pyke, 1998). A close supervisory relationship enhances graduate degree progress by involving the student more intensively in the department (Girves & Wemmerus, 1988). Kluever (1997) found that many students reported that conducting research was a relatively new experience for them. Doctoral students actively involved in research projects have more interactions with faculty members and complete their degrees at a higher rate (Cuny & Aspray, 2002; Maher, Ford, & Thompson, 2004).

Active involvement by faculty is how the student learns the norms and expectations of the discipline, as stated by Girves and Wemmerus (1988):

> Faculty are the gatekeepers to the scholarly professions. Faculty members are the socializing agents of the discipline; they impart the norms and expectations. Both the adviser's quality as a scholar and teacher as well as his or her concern for students have been cited as predictors of retention. (p. 171)

The faculty members are the critical agents of the socialization process, because they model the roles and behaviors of the discipline and provide practical help and advice to the student. Baird (1997) found that:

> Programs that do not make an effort to integrate students socially and academically into the department, that are not clear about the courses and experiences that will give students mastery of the discipline's methods and language, and that do not carefully monitor students' progress will have high numbers of ABD students. (p. 101)

The longer the student remains All But Dissertation (ABD), the longer the completion time will be and the higher the chance of attrition from the program.

Sometimes high completion times and the attrition rate are not solely student issues; the high completion times and attrition rates can also be attributed to the university's policies and program structure. In a study of graduate students, those who were teaching assistants felt the experience had not been beneficial in preparing them for dissertation research, while those who were research assistants felt the experience was beneficial (Krueger, 1991). Krueger's findings were supported by other authors (Allan & Dory, 2001; Ferrer de Valero, 2001) in which one of the major problems for completion of the doctoral degree was the lack of training to conduct research.

The lack of structure in the dissertation phase has been identified as a problem for many students (Allan & Dory, 2001; Kluever, 1997). If the university has provided

training on how to conduct research and faculty advisors provide direction and support, students will have the ability to complete the dissertation and their degree in a timely manner (Allan & Dory, 2001; Kluever, 1997). There are still numerous programs that are traditional, in that students are responsible for their educational requirements with little interaction between the student and the advisor (Dorn et al., 1995). One way to aid students in the timely completion of doctoral degrees is for graduate programs to ensure that structures and policies are designed to promote student success (Hirt & Muffo, 1998; Seagram et al., 1998).

Graduate students who complete their degree in a timely fashion have some common characteristics. Among these characteristics is a strong internal desire to complete the program. The strong internal desire or self-motivation also has a significant effect on persistence (Ivankova & Stick, 2007). This strong completion desire leads to more involvement and meeting more frequently with their advisor. The more a student is involved, the better the chance that they will collaborate with their advisors on research and journal articles and apply skills and knowledge gained from their professional experiences (Maher et al., 2004; Seagram et al., 1998). Other research (Golde, 1998; Kluever, 1997) suggests students without this strong internal desire are likely to be less persistent in degree completion.

Additional common characteristics of timely degree completion include the age of the graduate student, the marital status, and prior graduate experience (Allan & Dory, 2001; Baker, 1998; Fischer & Zigmond, 1998). Historically, most graduate students came directly from the undergraduate ranks; they were 21 to 25 years old and were unmarried (Berg & Ferber, 1983). This demographic, however, is changing. As stated by Fischer

and Zigmond (1998), "Graduate school is no longer the exclusive province of native-born, unmarried, 22-year-old white males" (p. 29). A study conducted by Girves and Wemmerus (1998) found that the average doctoral student was more likely to be married and to have been a parent while in graduate school. Research indicated that 60% of all graduate students were between 30 and 49 years of age (Dorn et al., 1995). These findings were supported by the National Center for Education Statistics, when they reported the average age of graduate students was 33 and that most students were married (Snyder, 2003).

Increased time to earn the doctoral degree makes pursuing a degree much less attractive, especially for students who rely on personal finances. Research indicated that students who must rely on their personal savings or earnings from employment take longer to complete their degrees (Abedi & Benkin, 1987; Hirt & Muffo, 1998). A study conducted by Maher et al. (2004) shows that over 30% of all doctoral recipients relied on their own resources to fund their doctoral studies. Baker (1998) found that students with loans, self-support, and tuition waivers were less likely to complete doctoral degrees.

In a study conducted at Boise State University on current graduate students and potential graduate students, Belcheir (1996) found that the biggest obstacles to degree completion were finances and work schedules. Both current graduate students and recent graduates reported that work schedules and finances were the biggest obstacles to overcome (Belcheir, 1996). These findings are reported to be one of the major stressors encountered by graduate students (Nonis et al., 1998; Rocha-Singh, 1994).

To reduce time to completion and curb attrition, universities should make an effort to recruit mature, highly motivated individuals to doctoral programs. Universities

should also establish policies and guidelines promoting student interaction with faculty members to enhance the research and training skills needed to successfully complete the doctoral degree.

Motivation and Persistence

Among the many reasons students decide to enroll in doctoral programs, the majority cite at least one of the following: the enjoyment of learning, an enhanced social status, higher earning potential, better working conditions, or a lower probability of unemployment (Boshier, 1971; Perna, 2004). Whatever the reason for enrollment, it takes a lot of motivation and persistence to complete a doctorate. In fact, "to earn a doctorate, a student must find the time and motivation in nonworking hours to attend classes, read, research and write papers" (Dorn et al., 1995, p. 305).

A high level of self-esteem is associated with high confidence levels (Leary, 2007). For a student, a high level of self-esteem usually occurs due to previous academic successes fostered by their academic ability. It is the academic ability that influences the student's assessment of completing a doctoral program (Perna, 2004). It must be noted that academic success and ability does not necessarily manifest itself in the form of Grade Point Average (GPA). Studies have tried to link undergraduate GPA as a predictor of doctoral completion. Attiyeh (1999) and others (Hurtado, Inkelas, Briggs, & Rhee, 1997; Zwick, 1988) have shown that undergraduate GPA is not a valid predictor of doctoral degree completion. It has been shown that with a higher undergraduate GPA, aspirations for a doctoral degree have increased (Walpole, 2006). While undergraduate GPA may not be the best predictor of doctoral completion, already having attained a master's degree does appear to be a good academic aptitude indicator of doctoral degree completion. Using

the results of a 1998 longitudinal study, Attiyeh (1999) suggested that students who complete master's degree programs are better prepared for the rigors and are more likely to persist in doctoral programs. Baker (1998) also found that students who had already earned master's degrees were more likely to complete doctoral degrees.

Students who have already earned a master's degree tend to be older, be more mature, and have a higher level of motivation. The increased levels of maturity and motivation older students bring to their educational endeavors may be due to the recognition of the importance that obtaining the doctoral degree can have on their lives (Jacobs & King, 2002). This recognition can lead to higher persistence and completion rates. The strength of motivation for enrolling in a doctoral degree program should also aid in the prediction of persistence and completion as well (Scott et al., 1998). Additionally, Scott et al. found that differences in motivation were most strongly related to previous level of education of the student.

Older students typically have more competing demands (such as marriage, parenting, employment) on their time than younger students (Battle & Wigfield, 2003; Jacobs & King, 2002). The more competing demands one has for their time usually leaves less time for studies, which, in turn, increases the probability of not being able to persist until completion (Jacobs & King, 2002; Stack, 2004). One question that arises when examining the older students with children: Is there an influence of children in the persistence of the graduate student? Younger children will need more attention from the parents. Does this extra attention detract from a student's ability to complete the doctoral degree? Stack (2004) postulated that completing the degree while parenting is possible if the student has strong time-management skills. His study found that students with

children had higher organizational skills and more stamina, both important characteristics of student persistence.

Summary

It is imperative that the educational process be examined in order to develop a successful doctoral program. At business schools, doctoral preparation means earning a Doctor of Philosophy (Ph.D.) or a Doctor of Business Administration (D.B.A.). Either method of doctoral preparation can satisfy the academic credentials required to maintain departmental accreditation by the AACSB. But with limited numbers of academically-qualified professors, fewer opportunities to enroll in doctoral programs exist.

Universities have discovered that on-line programs are a means to attract mature students who are currently employed but seek an advanced degree. However, a major factor in the completion of a doctorate is the mentoring relationship between the student and the faculty member. Student relationships with faculty members are crucial to the educational and professional development and ultimately to the student's graduate degree progress.

In 2005, the median amount borrowed by doctoral students was $44,733. This potential burden has been shown to deter students from doctoral degree enrollment. It has also been shown that receiving financial aid has a strong positive influence on doctoral degree enrollment. Once enrolled, universities must foster a sustained course schedule to accelerate degree completion. One factor linked to the increased time to degree completion is the dissertation process. To reverse the time to degree completion trend, doctoral programs should be designed to foster dissertation completion. More than 40%

of all students who fail to complete the doctoral program cite the dissertation process as a reason for non-completion.

In order to attract and retain doctoral students, universities must look at the factors facing potential graduate students. With an understanding of these factors, coupled with programs and policies to promote retention and completion, universities may expand doctoral programs enough to lead to a potential increase in faculty members available to colleges and universities across the country.

CHAPTER III

RESEARCH METHODOLOGY

This study was conducted to foster the creation of additional doctoral-prepared faculty members and to enhance the opportunities of retirement-eligible Air Force commanders to be faculty at the college level as a second career. The impetus for this research was derived from examining my own personal circumstances and conducting some initial investigation into the study that was conducted at the 2007 Air Force ROTC Commanders Conference held October 28 through November 1 in Atlanta, Georgia. The initial research study was used to determine if current AFROTC commanders were interested in continuing to teach at the college level and, if so, what was keeping them from pursuing a doctoral degree. The results showed that 69 out of 116 (60%) respondents would have liked to continue to teach at the college level after retiring from the Air Force (Williams, 2008). This initial study generated interest in determining if retirement-eligible Air Force commanders would be interested in getting a doctorate and becoming faculty at a college or university as a second career. Additionally, would they be interested in an innovative program designed to provide a doctoral degree that would enhance their potential employment as a college professor?

To help retirement-eligible Air Force commanders to secure faculty positions, the researcher developed, with the guidance of the Dean of a Business School at a Midwestern university, a concept program that could potentially provide these

commanders with the academic credentials necessary for employment at colleges and universities. In order to assess the fit for and interest of commanders in this program, the following research questions were investigated:

1. Would retirement-eligible Air Force commanders be interested in the PAT program?
2. Would retirement-eligible Lieutenant Colonels be interested in the PAT program?
3. Would retirement-eligible Colonels be interested in the PAT program?
4. Would retirement-eligible commanders be a good fit based on overcoming the following two entry barriers to doctoral programs:
   a. Monetary cost of program
   b. Time required to complete degree?
5. Would retirement-eligible commanders be a good fit based on overcoming the following three completion barriers to doctoral programs:
   c. Ability to work with a mentor
   d. Availability of program
   e. Ability to support self/family?
6. Were Lieutenant Colonels interested in teaching a better fit for the PAT program than Colonels interested in teaching based on the five constructs of:
   a. Monetary cost of program
   b. Time required to complete degree
   c. Ability to work with a mentor

d. Availability of program

e. Ability to support self/family?

Research Design

This study was conducted utilizing a survey developed by the researcher. The survey was reviewed by the University of North Dakota's Institutional Review Board to ensure protection of human subjects. For the first three research questions, the independent variable was the current military rank of the respondent. The dependent variable was the attraction level or interest in the proposed PAT concept program. For the last three research questions, the dependent variables were the individual (entry or completion) barrier scores. The study population was retirement-eligible United States Air Force commanders.

The response rate was expected to be high, as the researcher is a fellow current retirement-eligible Air Force commander. The professional courtesy extended to a peer was used to determine expected completion rates. Even though a professional courtesy was expected, survey participation was voluntary. Additionally, the commanders may have a vested interest in the outcome of the survey; thus, it was expected that the response rate would be high.

While the survey responses were not anonymous, confidentiality was maintained through the researcher being the only Air Force member to examine the completed surveys.

Participants

The population was retirement-eligible Air Force commanders. A total of 42 surveys was verbally administered or e-mailed to retirement-eligible Air Force

commanders. Of the 42 surveys, 36 were completed and returned. Of the 36 surveys completed, 5 were female and 31 were male. The sample included 5 Colonels and 31 Lieutenant Colonels previously or presently serving as the commander of an active duty unit. In order to become a commander, each person's career record had passed a selection board comprised of superior officers from throughout the United States Air Force. The selection board inspects the academic credentials and the officer's overall performance record as derived from their last five annual performance evaluations. All of the commanders surveyed had a minimum of one master's degree.

Instrumentation

The survey collected demographic data and contained 20 questions related to the six research questions. The demographic data collected included rank, gender, interest in teaching at the collegiate level after retiring from active duty, and interest in the PAT concept program. The constructs and survey questions were based on the current body of literature that identified entry and completion barriers in doctoral programs. The first construct was entry barriers. The entry barriers construct contained two sub-constructs: monetary cost of program and time required to complete degree. The second construct was completion barriers. The completion barriers construct contained three sub-constructs: ability to work with a mentor, availability of program, and ability to support self and family. The constructs are depicted graphically and can be seen in Appendix B. The survey used a six point Likert-type scale to ask 20 questions that will help identify if these well-educated and very competent leaders would be interested in this program and to assess their fit for a program like this. After each question, the respondent had to choose from the six levels of the items: (1) strongly disagree,

(2) disagree, (3) somewhat disagree, (4) somewhat agree, (5) agree, and (6) strongly agree.

For this study, fit was described as a composite score greater than 4 (defined as above neutral) in each of the constructs being measured. The six point Likert-type scale allowed for differentiation between agree and disagree with the constructs being measured. Disagreement with the idea was delineated with a composite score less than 3, neutral was delineated with a composite score of between 3 and 4, and agreement was delineated with a score greater than 4.

The survey was built using two constructs (entry barriers and completion barriers) related to doctoral degree completion. The construct of entry barrier had two sub-constructs: (a) monetary cost of program (questions 1-4) and (b) time required to complete degree (questions 5-8). The construct of completion barrier had three sub-constructs: (a) ability to work with a mentor (questions 9-12), (b) availability of a program (questions 13-16), and (c) ability to support self/family (questions 17-20). Each of the five sub-constructs used four questions. Reliability as defined by Cronbach's Alpha was calculated for each of the sub-constructs. For the entry barrier sub-construct of monetary cost of program, Cronbach's Alpha was .79. For the entry barrier sub-construct of time required to complete degree, Cronbach's Alpha was .74. The calculated Cronbach's Alpha for the completion barrier sub-construct of ability to work with a mentor was .81. The calculated Cronbach's Alpha for the completion barrier sub-construct of availability of program was .70. The calculated Cronbach's Alpha for the completion barrier sub-construct of ability to support self/family was .87. Reliability

as defined by Cronbach's Alpha for the entire survey was .89. A copy of the survey is provided in Appendix C.

Research Procedures

The survey was administered in person or via e-mail by the researcher. The researcher provided a verbal explanation to the commanders of the reason for this study and explained in detail how the PAT concept program works to those participants surveyed in person. For the surveys completed by e-mail, the verbal explanation and description was transcribed and included as part of the e-mail. The researcher had previously asked commanders if they would be willing to participate in completing a survey to be used to assess the fit and interest for the concept program. For those surveys administered in person, the researcher was present to answer questions about the survey, while it was administered. For the surveys administered via e-mail, all participants were encouraged to ask the researcher any questions that they had before they submitted their final responses. No questions were asked about the survey by any participant.

Data Analysis

The purpose of the study was to determine if retirement-eligible Air Force commanders would be a good fit for this program and if they would be interested in enrolling in this new concept program. Data analysis methods for each research question were as follows.

To answer research questions 1 to 3, frequency and percentage of respondents was calculated. The hypotheses for questions 1 to 3 were that retirement-eligible Air Force commanders would be interested in the proposed PAT concept program.

To answer research questions 4 and 5, percentage of agreement and disagreement for each question related to entry barriers and completion barriers was calculated. The hypotheses for questions 4 and 5 were that retirement-eligible Air Force commanders will be a good fit for the proposed PAT concept program based on overcoming the two entry barriers and three completion barriers to doctoral programs.

To answer research question 6, percentage of overall agreement and disagreement for each question related to entry barriers and completion barriers was calculated. A calculated composite score for the two constructs (4 questions per construct) that address entry barriers was used. A calculated composite score for the three constructs (4 questions per construct) that address completion barriers was used. These composite scores were an average of the individual questions of each construct. A composite score greater than 4 (greater than neutral) was considered a good fit. Finally, to address this research question, t-tests were used on the five constructs to assess the means of the two groups, Lieutenant Colonels and Colonels, to determine if there was a statistical difference. Comparing the results of each rank (Lieutenant Colonel vs. Colonel), each construct was treated as conceptually independent and given a Type I error rate of .05. The hypothesis for question 6 was that retirement-eligible Lieutenant Colonels interested in teaching would be a better fit than Colonels interested in teaching based on the five constructs for the proposed PAT concept program.

Delimitations and Limitations of the Study

A delimitation of this study was that it was focused solely on a convenience sample of 42 current Air Force commanders. While the convenience sample used was small, it

was assumed to be representative of the total population of retirement-eligible commanders, because all commanders are selected using the same criteria and process.

One of the limitations of this study is that it assumed all of the commanders interested in teaching at a college or university after retiring from the USAF were interested in teaching in the business department. This study is based on the respondent enrolling in a business degree while teaching in a business or leadership program. If the respondents desired to teach in some other department at a college or university, this study would not directly relate to their plans.

Summary

The purpose of the study was to assess the fit of these commanders for the proposed PAT concept program and to investigate if retirement-eligible Air Force commanders were interested in enrolling in this new concept program. Additionally, the study investigated if Lieutenant Colonels or Colonels were a better fit for this program. The hypothesis was that Lieutenant Colonels are more interested in the program and are a good fit for the program based on the five sub-constructs of (a) monetary cost of program, (b) time required to complete degree, (c) ability to work with a mentor, (d) availability of program, and (e) ability to support self/family. The hypothesis is based on the fact that Colonels retiring from the Air Force average 10 years older (55 as opposed to 45 years of age) than Lieutenant Colonels and receive 25% more in retirement pay. This increased age and income were expected to cause this group to be less inclined to enroll in the program, but, if they enrolled, they would be an equally good fit for the program.

CHAPTER IV

RESULTS

The results of the data analysis for this study are presented in this chapter. A profile of the respondents, including response rates, is provided first, followed by results presented in relation to each of the research questions. A summary of the results concludes this chapter.

Profile of Respondents

A total of 42 surveys were verbally administered or e-mailed to retirement-eligible Air Force commanders. Of the 42 surveys, 36 were completed and returned. The 36 completed surveys included 5 female and 31 male respondents. Additionally, the 36 returned surveys could be further subdivided into 5 Colonels and 31 Lieutenant Colonels. For the six surveys that were not returned, no contact occurred with the recipients. This non-contact usually means the recipient is currently deployed somewhere around the world and has limited e-mail capability. When Air Force members deploy for an extended period, a new e-mail account is established at the deployed location and is the primary e-mail address used. Oftentimes, the deployed member will not access the e-mail account which was established at the base to which they are permanently assigned. The overall response rate was 86%.

The respondents represent varied backgrounds and include weather squadron commanders, communications squadron commanders, security forces squadron

commanders, maintenance squadron commanders, and training and operational flying squadron commanders stationed around the world, or who have previously held squadron commander positions and are now working in a staff job at a higher headquarters level. The Air Force rank and hierarchy structure dictates squadron commanders usually hold the rank of Lieutenant Colonel and group or wing commanders hold the rank of Colonel. The Colonels surveyed were group commanders and wing commanders. The Lieutenant Colonels were current or previous squadron commanders. Of the 36 commanders who responded, 5 were female and 31 were male.

Research Question One

The first research question sought to determine if retirement-eligible Air Force commanders would be interested in the PAT program. The majority (83%) of the commanders reported that they were interested in a program like the one described (Table 1).

Table 1. Frequency and Percentage of Program Interest by Respondents.

	N	%
Interested	30	83
Not Interested	6	17

A second factor, desire to teach at a university after retiring from the Air Force, was also examined to aid in discerning interest in the program. The majority (86%) of the commanders reported that they were interested in teaching at a university after retiring from the Air Force (Table 2).

Table 2. Frequency and Percentage of Desire to Teach at University After Retiring From Air Force by Respondents.

	N	%
Interested	31	86
Not Interested	5	14

Of the six respondents who identified that they would not be interested in a program like this, four (67%) of them expressed no interest in teaching at a university after retiring from the Air Force. The remaining two indicated that they would like to teach in some other discipline other than business at the university. One respondent identified an interest in the program, but had no desire to be on faculty at a university after retirement. This respondent was interested in this program to further his own learning, but was not interested in a college teaching position.

Research Question Two

The second research question sought to determine if retirement-eligible Lieutenant Colonels would be interested in the PAT program. The majority (87%) of the Lieutenant Colonels reported that they were interested in this program (Table 3).

Table 3. Frequency and Percentage of Program Interest by Lieutenant Colonels.

	N	%
Interested	27	87
Not Interested	4	13

Of the four respondents who were not interested in a program like this, three (75%) expressed no desire to teach at a university after retiring from the Air Force. While one (25%) indicated an interest to teach at a university, just in another discipline.

Research Question Three

The third research question sought to determine if retirement-eligible Colonels would be interested in the PAT program. Completed surveys provided the source data for the answering of this question. After a description of the program, the Lieutenant Colonels were asked if they would be interested in a program like this one. Three out of five (60%) of the Colonels reported that they were interested in this program (Table 4).

Table 4. Frequency and Percentage of Program Interest by Colonels.

	N	%
Interested	3	60
Not Interested	2	40

Of the two respondents who were not interested in a program like this, one (50%) expressed no desire to teach at a university after retiring from the Air Force. While one (50%) indicated an interest in teaching at a university, just in another discipline.

Research Question Four

The fourth research question sought to determine if retirement-eligible commanders would be a good fit based on overcoming doctoral program entry barriers (monetary cost of program and time required to complete degree). A calculated composite score for the two constructs (four questions per construct) that addressed entry barrier was used. The composite score was an average of the individual questions of each

construct. Each Air Force commander provided four responses based on monetary cost of the program and four responses based on the time required to complete a degree. A calculated composite score was determined for all 36 respondents (Table 5). A calculated composite score was determined for the 30 respondents who expressed interest in the proposed PAT concept program (Table 6).

Table 5. Percentage of Agreement and Disagreement of Entry Barrier by Air Force Commanders (N=36).

Sub-construct	Disagree	Neutral	Agree
Monetary cost of program	3%	22%	75%
Time required to complete degree	3%	11%	86%

Table 6. Percentage of Agreement and Disagreement of Entry Barrier by Air Force Commanders With an Interest in the PAT Concept Program (N=30).

Sub-construct	Disagree	Neutral	Agree
Monetary cost of program	0%	20%	80%
Time required to complete degree	0%	3%	97%

The first entry barrier tested was monetary cost of program. The composite mean was determined using the following four questions: (1) I am willing to spend the money necessary to earn a doctoral degree; (2) I could afford to spend $1,000 month on my education; (3) I would be willing to do this program for three years at a salary of $40,000 to obtain an $80,000/yr job; and (4) I feel this program is a worthy financial investment.

The percentage of agreement and disagreement for the questions regarding the entry barrier of monetary cost of program is depicted for all respondents in Table 7. The responses for the individual questions are in Appendix D.

Table 7. Percentage of Agreement and Disagreement of Each Question for Monetary Cost of Program by Air Force Commanders (N=36).

Number	Question	Disagree	Agree
1	I am willing to spend the money necessary to earn a doctoral degree.	14%	86%
2	I could afford to spend $1,000 month on my education.	11%	89%
3	I would be willing to do this program for three years at a salary of $40,000 to obtain an $80,000/yr job.	22%	78%
4	I feel this program is a worthy financial investment.	6%	94%

The second entry barrier tested was time required to complete degree. The composite mean was determined using the following four questions: (5) I would be interested in a program that allows me to complete a DBA in nine semesters (3 years); (6) In order to complete a doctoral degree I would be willing to take three classes per semester and continue to maintain employment for 3 years; (7) Completing a doctoral degree in minimal time is important to me; and (8) This program is designed to help me complete my degree in a reasonable amount of time.

The percentage of agreement and disagreement for the questions regarding the entry barrier of time required to complete degree for all respondents is depicted in Table 8. The responses for the individual questions are in Appendix E.

Table 8. Percentage of Agreement and Disagreement of Each Question for Time Required to Complete Degree by Air Force Commanders (N=36).

Number	Question	Disagree	Agree
5	I would be interested in a program that allows me to complete a DBA in nine semesters (3 years).	14%	86%
6	In order to complete a doctoral degree I would be willing to take three classes per semester and continue to maintain employment for 3 years.	8%	92%
7	Completing a doctoral degree in minimal time is important to me.	8%	92%
8	This program is designed to help me complete my degree in a reasonable amount of time.	0%	100%

Research Question Five

The fifth research question sought to determine if retirement-eligible commanders would be a good fit based on overcoming doctoral program completion barriers (ability to work with mentor, availability of program, and ability to support self/family). A calculated composite score for the three sub-constructs (four questions per construct) that addressed completion barriers was used. The composite score was an average of the individual questions of each construct. Each Air Force commander provided four responses based on ability to work with a mentor, four responses based on availability of

program, and four responses based on the ability to support self/family. A calculated composite score was determined for all 36 respondents (Table 9). A calculated composite score was determined for the 30 respondents who expressed interest in the proposed PAT concept program (Table 10).

Table 9. Percentage of Agreement and Disagreement of Completion Barrier by Air Force Commanders (N=36).

Sub-construct	Disagree	Neutral	Agree
Ability to work with a mentor	0%	0%	100%
Availability of program	3%	8%	89%
Ability to support self/family	8%	14%	78%

Table 10. Percentage of Agreement and Disagreement of Completion Barrier by Air Force Commanders With an Interest in the PAT Concept Program (N=36).

Sub-construct	Disagree	Neutral	Agree
Ability to work with a mentor	0%	0%	100%
Availability of program	0%	3%	97%
Ability to support self/family	7%	13%	80%

The first completion barrier tested was ability to work with a mentor. The composite mean was determined using the following four questions: (9) I am willing to accept teaching/career/research guidance from a mentor; (10) I am confident in my ability to learn how to conduct scholarly research from a mentor; (11) I am confident in my

ability to foster a relationship with a mentor; and (12) This program fosters my academic education through mentoring.

The percentage of agreement and disagreement for the questions regarding the completion barrier of mentoring for all respondents is depicted in Table 11. The responses for the individual questions are in Appendix F.

Table 11. Percentage of Agreement and Disagreement of Each Question for Ability to Work With a Mentor by Air Force Commanders (N=36).

Number	Question	Disagree	Agree
9	I am willing to accept teaching/career/research guidance from a mentor.	0%	100%
10	I am confident in my ability to learn how to conduct scholarly research from a mentor.	0%	100%
11	I am confident in my ability to foster a relationship with a mentor.	0%	100%
12	This program fosters my academic education through mentoring.	3%	97%

The second completion barrier tested was availability of program. The composite mean was determined using the following four questions: (13) I have successfully completed a PME course on-line; (14) I have the self-discipline necessary to complete an on-line program; (15) I am comfortable taking on-line classes; and (16) I feel this program was designed for someone like me.

The percentage of agreement and disagreement for the questions regarding the completion barrier of availability of program for all respondents is depicted in Table 12. The responses for the individual questions are in Appendix G.

Table 12. Percentage of Agreement and Disagreement of Each Question for Availability of Program by Air Force Commanders (N=36).

Number	Question	Disagree	Agree
13	I have successfully completed a PME course on-line.	11%	89%
14	I have the self-discipline necessary to complete an on-line program.	3%	97%
15	I am comfortable taking on-line classes.	8%	92%
16	I feel this program was designed for someone like me.	8%	92%

The third completion barrier tested was ability to support self/family. The composite mean was determined using the following four questions: (17) Assuming I collect my AF retirement pay and $40,000/yr and assistant professor pay, I can meet my financial obligations; (18) I could afford to spend $1,000 month on education; (19) I would be willing to spend $1,000 month for 36 months in this program; and (20) This program provides sufficient financial support to maintain an acceptable standard of living.

The percentage of agreement and disagreement for the questions regarding the completion barrier of ability to support self/family for all respondents is depicted in Table 13. The responses for the individual questions are in Appendix H.

Table 13. Percentage of Agreement and Disagreement of Each Question for Ability to Support Self/Family by Air Force Commanders (N=36).

Number	Question	Disagree	Agree
17	Assuming I collect my AF retirement pay and $40,000/yr and assistant professor pay, I can meet my financial obligations.	11%	89%
18	I could afford to spend $1,000 month on education.	8%	92%
19	I would be willing to spend $1,000 month for 36 months in this program.	17%	83%
20	This program provides sufficient financial support to maintain an acceptable standard of living.	14%	86%

Research Question Six

The sixth research question sought to determine if retirement-eligible Lieutenant Colonels felt they were a better fit for the PAT program than Colonels based on all five constructs together. The five constructs were entry barriers (monetary cost of program and time required to complete degree) and completion barriers (ability to work with a mentor, availability of program, and ability to support self/family). An independent sample t-test was used to assess the mean difference of the two groups, Lieutenant Colonels and Colonels, specifically to determine if there was a difference.

For the first entry barrier of monetary cost of program, the mean composite score for Colonels was 4.4 and the mean composite score for Lieutenant Colonels was 4.7. The difference was 0.3. The standardized effect size was 0.37. This was not statistically significant, $t(34)= 0.822$, $p>.05$. The composite means of questions one through four for

Colonels and Lieutenant Colonels are in Figure 1. The individual responses for the entry barrier of Monetary Cost of Program are depicted in Appendix D.

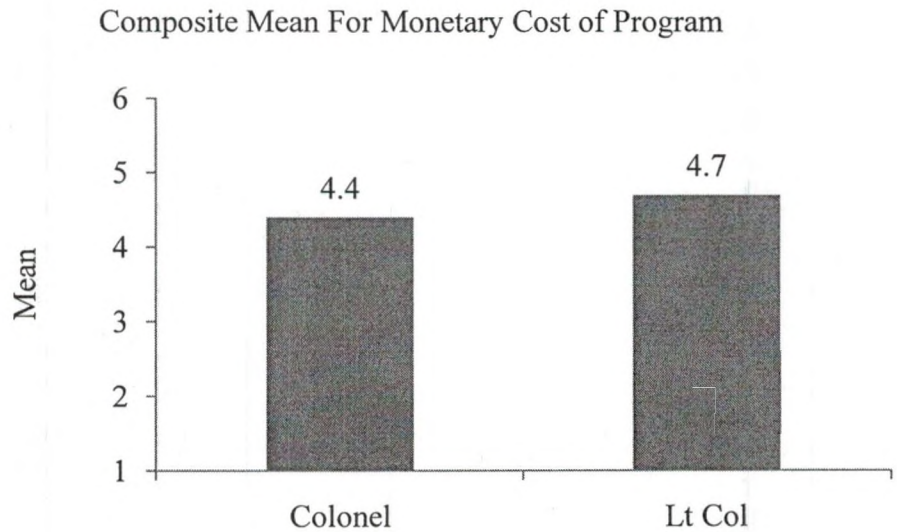


Figure 1. Composite mean for monetary cost of program.

For the second entry barrier of time required to complete degree, the mean composite score for Colonels was 4.7 and the mean composite score for Lieutenant Colonels was 4.9. The difference was 0.2. The standardized effect size was 0.26. This was not statistically significant, $t(34)= 0.524$, $p>.05$. The composite means of questions five through eight for Colonels and Lieutenant Colonels are in Figure 2. The individual responses for the entry barrier of Time Required to Complete Degree are depicted in Appendix E.

For the first completion barrier of ability to work with a mentor, the mean composite score for Colonels was 5.6 and the mean composite score for Lieutenant Colonels was 5.4. The difference was 0.2. The standardized effect size was -0.39. This was not statistically significant, $t(34)= -0.771$, $p>.05$. The composite means of questions

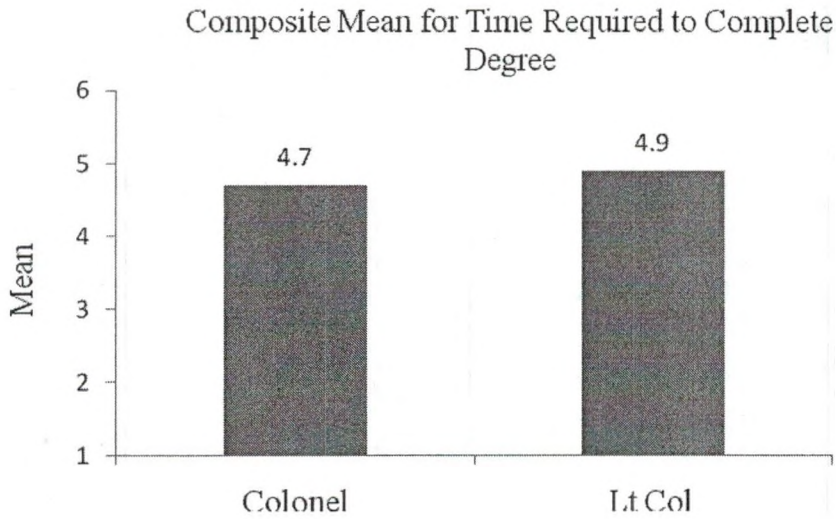


Figure 2. Composite mean for time required to complete degree.

nine through twelve for Colonels and Lieutenant Colonels are in Figure 3. The individual responses for the completion barrier of Ability to Work With a Mentor are depicted in Appendix F.

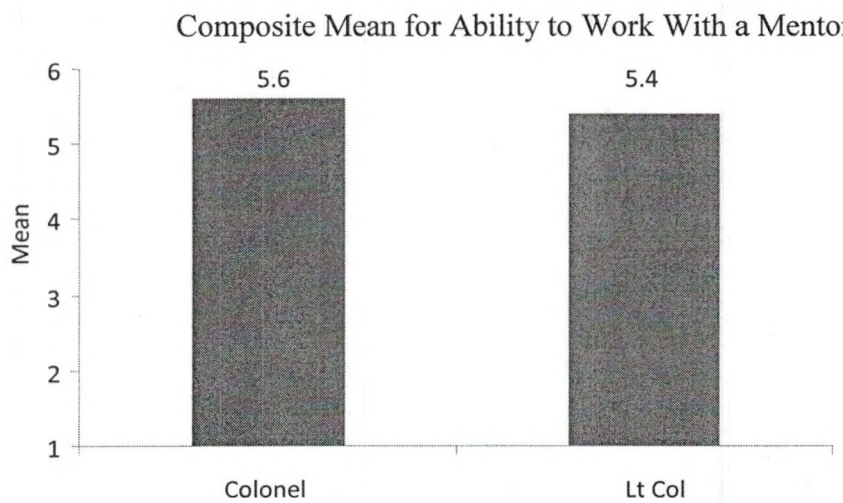


Figure 3. Composite mean for ability to work with a mentor.

For the second completion barrier of availability of program, the mean composite score for Colonels was 5.1 and the mean composite score for Lieutenant Colonels was 5.3.

The difference was 0.2. The standardized effect size was 0.26. This was not statistically significant, t(34)= 0.685, $p>.05$. The composite means of questions thirteen through sixteen for Colonels and Lieutenant Colonels are in Figure 4. The individual responses for the completion barrier of Availability of Program are depicted in Appendix G.

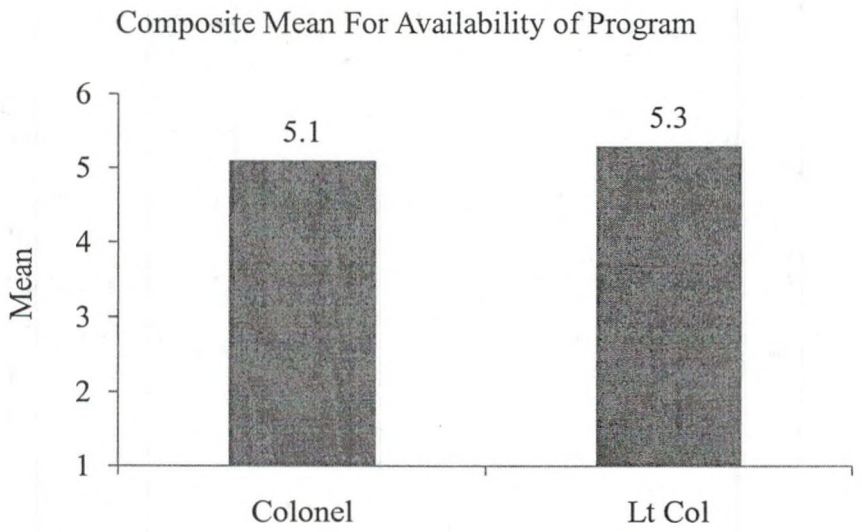


Figure 4. Composite mean for availability of program.

For the third completion barrier of ability to support self/family, the mean composite score for Colonels was 4.6 and the mean composite score for Lieutenant Colonels was 4.7. The difference was 0.1. The standardized effect size was 0.11. This was not statistically significant, t(34)= 0.162, $p>.05$. The composite means of questions seventeen through twenty for Colonels and Lieutenant Colonels are in Figure 5. The individual responses for the completion barrier of Ability to Support Self/Family are depicted in Appendix H.

For overall program fit, the mean composite score for Colonels was 4.9 and the mean composite score for Lieutenant Colonels was 5.0. The difference was 0.1. The standard effect size was 0.18. This was not statistically significant, t(34)= 0.491, $p>.05$.

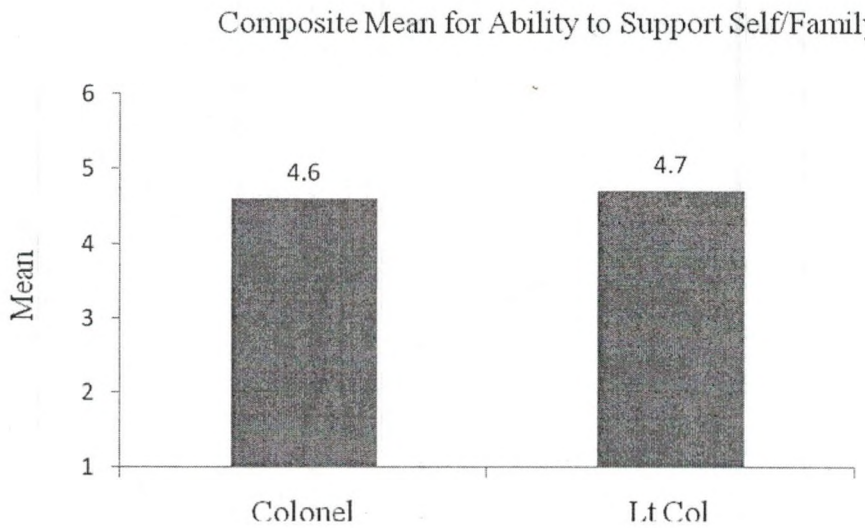


Figure 5. Composite mean for ability to support self/family.

The composite means of questions one through twenty for Colonels and Lieutenant Colonels are in Figure 6.

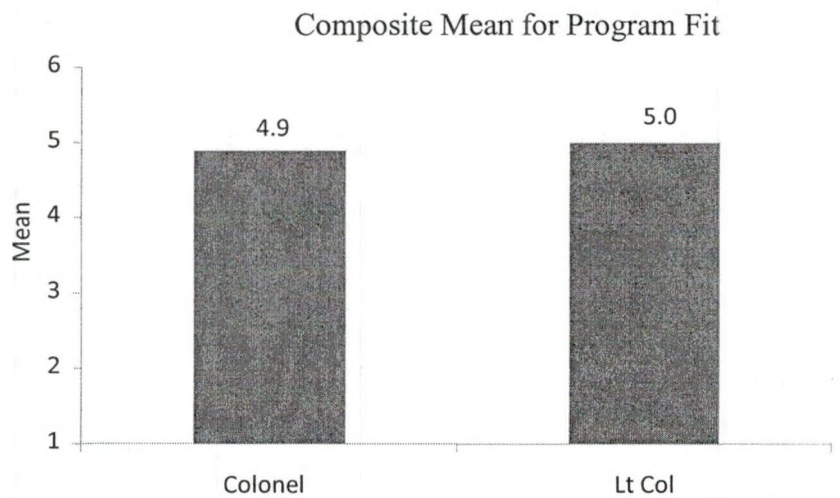


Figure 6. Composite mean for program fit.

Summary of Findings

Prior to conducting this research, the researcher hypothesized that the majority of retirement-eligible Air Force commanders would be interested in the PAT concept

program. A strong interest in teaching at the university level was expected because most of the Air Force commanders have instructor experience in their profession. Many Air Force career specialties not only require that officers master the skills necessary for their profession, but they also require an instructor rating as part of career progression. In order to be selected as a commander in most career specialties, an instructor rating is required.

The survey results show that a large majority of commanders in the study were interested in teaching at the university level after retiring from the Air Force. Additionally, the results confirm the hypothesis was correct in that a majority of retirement-eligible Air Force commanders in this study were interested in the proposed PAT concept program. The results also show that the majority of Lieutenant Colonels in this study were interested in the proposed PAT concept program. Additionally, the results show that 3 out of 5 Colonels in this study were interested in the proposed PAT concept program as well.

Based on the ability to overcome the entry barriers and completion barriers associated with doctoral programs, the results show that retirement-eligible commanders felt that they were a good fit for the proposed PAT concept program. The results show that there is no evidence of a difference in program fit between Lieutenant Colonels and Colonels.

CHAPTER V

SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

In this chapter, there are four sections that provide an overview of the study. The first section includes a summary of the study to include the purpose of the study, the research problem and questions, population, instrument, data analysis and principal findings. A discussion of the findings and how the findings relate to the literature follows the summary. The conclusions of the study are presented after the discussion and are followed by recommendations supported by the findings.

Summary

The current shortage of doctoral-prepared faculty is creating a continuous cycle of perpetuation. With a shortage of faculty, business schools are limited in the number of students accepted into doctoral programs (Doctoral Faculty Commission, 2003). This limited enrollment ensures that a finite number of graduates is produced; unfortunately, the number of graduates produced is smaller than the required amount to satisfy industry and academia (Doctoral Faculty Commission, 2003). As current faculty members continue to age and reach retirement, the shortage will only increase unless new production and recruitment methods are incorporated (Doctoral Faculty Commission, 2003).

In order to produce the necessary graduates, schools of business must explore new and innovative programs that will attract high-quality students capable of completing a

rigorous course of study. Previous research identified barriers to entry and completion that potential and current students face as they pursue advanced education (Doctoral Faculty Commission, 2003).

The goal of this study was to investigate how the creation of a new and innovative doctoral program may lead to an increase in the number of doctoral-prepared faculty members. The purpose of the study was to see if retirement-eligible Air Force commanders would be interested in enrolling in this new concept program and to see if they would be a good fit for this program.

The study was limited to a convenience sample of retirement-eligible Air Force commanders. The instrument used was developed by the researcher based on previous work conducted regarding barriers to advanced education faced by military commanders and the current body of literature. The instrument was built around two main constructs (entry and completion barriers) as determined by the 2003 study conducted by the AACSB. The two main constructs contained a total of five sub-constructs. The instrument used a total of 20 questions (four questions per sub-construct). The five sub-constructs were two identified entry barriers (monetary cost of program and time required to complete degree) and three identified completion barriers (ability to work with a mentor, availability of program, and ability to support self/family). The instrument also captured some demographic data.

Forty-two surveys were administered or sent via e-mail to the convenience sample. A total of 36 of 42 surveys were returned for a response rate of 86%. Of the respondents, the majority (86%) held the rank of Lieutenant Colonel. The remainder of the respondents (14%) held the rank of Colonel. The responses indicate that 83% of

current Air Force commanders were interested in the proposed PAT concept program. Specifically, 87% of Lieutenant Colonels and 60% of Colonels were interested in this program. The responses for the Lieutenant Colonels and Colonels were then analyzed against the two main constructs for fit in this program. Fit was defined as having a composite mean score of greater than 4.0. The results showed that both Lieutenant Colonels (4.7 and 4.9 composite means) and Colonels (4.4 and 4.7 composite means) felt that they were a good fit for this program based on overcoming the two entry barriers. The results also showed that both Lieutenant Colonels (5.4, 5.3, and 4.7 composite means) and Colonels (5.6, 5.1, and 4.6 composite means) felt that they were a good fit for this program based on overcoming the three completion barriers. Finally, the results showed that there is no evidence of a difference between Lieutenant Colonels (5.0 composite mean) and Colonels (4.9 composite mean) for overall program fit.

Discussion

The PAT concept D.B.A. is considered a professional degree using the description provided by the Council of Graduate Schools (2005). Being categorized as a professional degree, the ideal student, as described by Neumann (2005), are those with professional experience, usually within management, with several years' professional experience, often at the senior level. Neumann's ideal student can be found by looking at retirement-eligible Air Force commanders. If the retirement-eligible commanders have an interest in securing a second career as a member of academia, the majority of them will need to advance their current education credentials to be attractive to colleges and universities. Additionally, if the commanders choose to engage in a second career in academia, they will need an attractive means to acquire the necessary academic

credentials. This attractive means presents itself in the form of the proposed PAT concept D.B.A. Enrollment and completion of this program not only prepares the student academically, it also aids in filling the current void of doctoral-prepared faculty.

The results of this study show that retirement-eligible Air Force commanders in this study (83%) were interested in the proposed PAT concept program. This interest is generated from a majority (86%) of Air Force commanders in this study expressing a desire to teach at the college level as a second career. By further analyzing the results, it is shown that 87% of Lieutenant Colonels and 60% of Colonels in this study were interested in this program. Historically (1955-1975), 70% of graduate students have expressed a desire to enter academia (Doctoral Faculty Commission, 2003; Wheeler, 1967) whereas, in recent history (1975-present), the average has been about 40% interest in college teaching (Doctoral Faculty Commission, 2003). These results are dramatically different than the current average graduate students' intention. According to the Doctoral Faculty Commission (2003), only 37% of current graduate business students plan to enter academia.

This program was specifically designed to overcome the entry and completion barriers, identified in the Doctoral Faculty Commission (2003) report, associated with doctoral programs nationwide. The financial barrier has the largest effect on degree completion as can be seen in that it appears as both an entry and completion barrier (Doctoral Faculty Commission, 2003; Millet, 2003).

Students make decisions about doctoral degree enrollment based on the costs of enrollment (Jantzen, 2000; Montgomery & Powell, 2006; Perna, 2004) and their ability to support themselves and their families with the loss of earnings from employment (Baker,

1998; Jantzen, 2000). The responses provided by the commanders show, that for them, their financial situation, coupled with the unique financial incentives of the PAT concept program, decrease the financial barrier for entry and completion. The decrease in the effect of the financial barriers helps make this program interesting to retirement-eligible commanders and allows them to be a good fit for this program as well.

Since the time that this study was initially conducted, there have been some changes in the education benefits offered to military members. In the past, many military members were ineligible for the Montgomery GI Bill, administered by the Veterans Administration, based on their method of accession or their voluntary enrollment. As of October 1, 2008, all members of the military are eligible for a newer version of the GI Bill. This newer version entitles military members to an increased amount of money to be used for tuition and books. Additionally, the new GI Bill provides a housing allowance for those members who separate from the military and enroll in an educational program. This new GI Bill will essentially minimize the financial barriers associated with this concept program. Not only would a retiring commander still collect their retirement pay, they would also collect the cost of tuition and books from the Veterans Administration, while receiving a housing allowance and collecting their Assistant Professor pay. This change should make this program even more attractive to retiring commanders and could make a substantial impact on the doctoral-prepared faculty shortage that exists today.

The second entry barrier, time required to complete degree, is also overcome by this program. The median time spent enrolled as a graduate student has increased to eight years, according to the Council of Graduate Schools (2007). Approximately 50% of all people who drop out of doctoral programs do so within their first two years of graduate

school (Ehrenberg & Mavros, 1995). This program is designed for completion in three years by the Air Force commanders who already have at least one master's degree. Studies have found that time to complete degree and completion rate are related and that programs with high completion rates are often those in which students take relatively short times to earn their degree (Di Pierro, 2007; Ferrer de Valero, 2001). Thirty-six (100%) of the commanders identified they would be interested in this program because of the relatively short time required to complete the degree.

Fit was defined as having a composite mean score of greater than 4.0. The results showed that both Lieutenant Colonels (4.7 composite mean) and Colonels (4.9 composite mean) felt that they were a good fit for this program based on overcoming the entry barrier of time required to complete degree.

A student's interest in this program does not mean that the student is well-suited for a program. This program requires that a substantial amount of work be completed through distance education, specifically on-line courses. This on-line delivery method can accommodate student demand for advanced education in ways that are campus independent (Baer, 1998; Council of Graduate Schools, 2007). Numerous researchers (Ghezzi, 2007; Irizarry, 2002; Kearsley, 2002; Sherry, 1996) have found that distant learners are typically older and more mature and are critical thinkers who accept responsibility for their own learning. The commanders overwhelmingly (97%) stated they have the self-discipline necessary to complete an on-line program. The attributes described previously, coupled with the experience and comfort level retirement-eligible Air Force commanders have with on-line programs (89% have successfully completed on-line Professional Military Education (PME)), make them a good fit for this program.

In order to be promoted, officers must complete four levels of PME. Three of the four levels can be completed on-line. The first level is Basic Developmental Education (BDE) taken as a Lieutenant. This course is only offered in residence. The next level is taken as a Captain, followed by a level completed as a Major, and the last level is completed as a Lieutenant Colonel. In addition to the on-line PME that military commanders in the Air Force receive, there is an on-line master's degree program associated with the PME course completed as a Major. This program provides Air Force PME and a master's degree from an accredited institution, Air University. The on-line master's degree is a 33 semester-hour program comprised of 11 eight-week courses. Students participate in asynchronous on-line classes facilitated by credentialed faculty, where they read, evaluate, and discuss course material. Course material includes readings, multi-media presentations, simulations, lesson-by-lesson activities, peer and self assessments, instructor reviews, capstone essay examinations, and a research project. Upon successful completion, students are awarded their Master of Military Operational Art and Science Degree.

Fit was defined as having a composite mean score greater than 4.0. The results showed that both Lieutenant Colonels (5.3 composite mean) and Colonels (5.1 composite mean) were a good fit for this program based on overcoming the completion barrier of availability of program. Not only were these commanders interested in this program, they were also a good fit based on the characteristics needed to successfully complete on-line education. This interest and fit provide motivation for timely completion of this program as well.

A major factor in the timely completion of a doctorate is the mentoring relationship between the student and the faculty member (Girves & Wemmerus, 1988; Maher et al., 2004; Seagram et al., 1998). Regular supervision is strongly associated with successful completion (Seagram et al., 1998). The PAT concept program is designed to foster a mentoring relationship through the structure of the program, which enhances the ability to complete a doctoral degree. Responses provided by the commanders show they were confident in their ability to work with (100% of respondents) and learn from (100% of respondents) a mentor and that this program fosters this ability (97% of respondents). These responses lead one to believe that commanders were a good fit for this program. The data support this belief as well. Fit was defined as having a composite mean score of greater than 4.0. The results showed that both Lieutenant Colonels (5.4 composite mean) and Colonels (5.6 composite mean) felt that they were a good fit for this program based on overcoming the completion barrier of mentoring.

Many factors such as location and distance from permanent address have an effect on enrollment in graduate programs (Bures et al., 2000; Johanson, 2005; Kallio, 1995). Offering classes on-line, while allowing potential students to seek employment at almost any college or university, will theoretically improve enrollment, and aids in overcoming the barrier of program availability. An important factor for retiring military members is the ability to choose where they live. Over the course of a 20-year career, military commanders move where the Air Force sends them instead of the commanders choosing their location. This program allows commanders to choose where they live based on their desires, not on the availability of a doctoral degree granting institution. Having the ability to decide where they would like to live and still being able to complete a degree are very

attractive to these commanders. The unique design of this program enhances the commanders' interest as well. The proven ability of these commanders to complete on-line programs and work with a mentor shows that commanders' were a good fit for this program.

Two entry barriers and three completion barriers were examined and used in the design of this program. By addressing and providing a way to overcome these barriers, this program is attractive to retiring Air Force commanders. Not only is the program attractive, but it fits these commanders nicely. These commanders have experience in taking on-line classes, they have been mentored throughout their careers, and they have the financial means necessary to complete a doctoral degree. The interest and fit of these commanders make this program a way to increase the pool of doctoral-prepared faculty members for colleges and universities around the country.

Conclusions

Business schools across the country are turning potential students away for a lack of qualified faculty members. With the acceptance of this program, business schools not only gain experienced faculty members, they can increase their academically-qualified faculty pool in three years. The acceptance of the PAT concept program gets professionally-qualified faculty members into the classroom with a resulting increase in the number of students who can be admitted into traditional academic programs.

In order for schools to implement the PAT concept program, they must seek out and find the ideal candidate for entry. The ideal candidate can be found in retirement-eligible Air Force commanders. There is considerable interest in the form of retirement-eligible Air Force commanders in a program like the PAT concept. The

interest comes from both Lieutenant Colonels and Colonels. Each rank brings with it different experiences and backgrounds, but has the commonality of many years of leadership experience and they already hold at least one master's degree. Not only were these commanders interested, but they have also proven themselves to be highly motivated, as can be seen in their rank and stature as commanders. These characteristics make them the ideal candidate for this type of program.

The retirement-eligible Air Force commanders in this study were a good fit for the PAT concept program based on their ability to overcome the common entry barriers (monetary cost of program and time required to complete degree) associated with doctoral programs. The commanders surveyed were willing to spend the money to earn a doctoral degree and felt this program was a worthy financial investment in their futures. Additionally, the commanders surveyed have previously shown the motivation level to succeed in the highly competitive promotion and command selection system of the United States Air Force. The survey responses from these commanders also showed that they were willing to enroll in a program like the proposed PAT concept program in order to achieve a doctoral degree in a relatively short amount of time.

The retirement-eligible Air Force commanders surveyed felt they were a good fit for the PAT concept program based on their ability to overcome the common completion barriers (ability to work with a mentor, availability of program, and ability to support self/family) associated with doctoral programs.

The results show no evidence of a difference in retirement-eligible Lieutenant Colonels and retirement-eligible Colonels based on the entry and completion barriers associated with doctoral degrees. There may be some decrease in the motivation

necessary to enroll in and complete a program like the PAT concept for retirement-eligible Colonels in some respects. From a financial aspect, retirement-eligible Colonels receive approximately 25% more in retirement earnings from the Air Force due to their increased time of service. Colonels have an average 7 to 10 years more experience than Lieutenant Colonels; it was hypothesized that this would make them less likely to pursue a degree, when their experience would garner a well-paying job in a civilian sector outside of academe. However, the results show that there is no evidence of a significant difference in retirement-eligible Lieutenant Colonels and retirement-eligible Colonels based on the entry and completion barriers associated with doctoral degrees. Both Lieutenant Colonels and Colonels have proven abilities to work with mentors, both have experience with on-line programs, and both have the self-discipline necessary to complete an on-line degree. Each rank, Lieutenant Colonel and Colonel, has the financial means to support themselves and their families while in the proposed PAT program.

Recommendations

Recommendations for Further Study

1. A similar study should be conducted using a larger and random sample of retirement-eligible Air Force commanders. The convenience sample used encompassed many career fields, but not all of the career fields in the Air Force. By studying a broader sample, the results could be generalized to a greater population.
2. A similar study should be conducted using a larger and random sample of retirement-eligible Air Force commanders who are currently academic instructors. This population could include Air Force ROTC instructors, Air

War College instructors, and Air Command and Staff College instructors. Each of these populations has the academic credentials and the leadership experience necessary to be an ideal fit for this program. A study involving more experienced academic instructors may lead to additional areas that assess interest and fit better.

3. A similar study should be conducted using a larger and random sample of retirement-eligible military commanders. The sample used consisted entirely of Air Force commanders. Other branches (Army, Navy, Marine Corps) of the services have approximately the same academic and leadership credentials to qualify them for this type of program as well. A study of this magnitude may determine that this concept program may need to be housed at multiple universities so as to not exceed the capabilities of a single host university while meeting the demand for this program.

Recommendations for Universities to House This Program

1. One university recommended to house this concept program is a traditional brick and mortar university like the Florida State University. Florida State University is recommended because of its current experience with non-traditional delivery of graduate programs. Additionally, Florida State University has an AACSB accredited doctoral program already in existence. With this accreditation and experience in offering non-traditional education options, Florida State University would be an ideal school to house this program.

2. Another university recommended to house this concept program is a non-traditional university like the University of Phoenix. The University of Phoenix is recommended because of the various degrees it currently offers on-line. While the University of Phoenix does not have an AACSB accredited doctoral program, the blended approach of this concept program may provide the university with the components of their program deemed missing by the AACSB. This would be a huge gain for both the students and the university.

With accredited doctoral programs currently offered at Florida State University, the proven experience with on-line learning, and the infrastructure already in place, all that would be needed to begin administration of this program would be one additional overhead staff member to operate as the program coordinator. Additionally, successful on-line programs in other areas of a university allow for new doctoral programs that target a different category of student and bring with it financial benefits as well as a closer connection to the profession (Neumann, 2005).

The flexibility of this program would aid many smaller institutions around the country, like the University of North Dakota. With a program like the PAT concept, the University of North Dakota could get a faculty member on staff who is professionally-qualified, as defined by the AACSB, while that faculty member pursues their doctoral degree. This allows for both the university and the faulty member to meet a need in existence. For the university, it gets a qualified faculty member; the faculty member gets to live at a place of their choosing, not bound by the location of a doctoral granting institution, while having the opportunity to engage in a job they desire.

With the activation of the new GI Bill, the host university can generate a new source of revenue for the cost of one overhead staff member acting as the program coordinator. By adopting this program, the host university can admit students into this program who will have all tuition and fees paid by the United States government. This means no tuition waivers, grants, or scholarship money would be needed for student retention.

The findings of this study suggest that this program is worthy of further study by colleges, universities, and the AACSB. It also shows the targeted population, retirement-eligible Air Force commanders, were interested and would be a good fit for this program. By creating this program and attracting retiring Air Force commanders, there is an opportunity to increase the pool of faculty members with doctoral degrees. This increased pool of academically-qualified faculty members will allow schools to admit more students, foster completion of the advanced degree, and ultimately reduce the current shortage of doctoral-prepared faculty members in academia.

APPENDICES

Appendix A
Concept Program

The PAT (Professionally Qualified to Academically Qualified to Tenure) Doctor of Business Administration Program

Overview

The PAT Doctor of Business Administration (DBA) is designed to work hand in hand with participating universities to take the Association to Advance College Schools of Business (AACSB) professionally qualified faculty member to the tenure granting process. This program was designed to serve working academic professionals through a unique blend of coursework, teaching, research, and mentoring to meet your career goals while also meeting the AACSB suggested faculty qualification standards for your university.

This program is administered by XXX through on-line course delivery and an on campus defense of your dissertation, coupled with research mentoring conducted by a fully tenured professor at your university of employment. As you progress through the program, your mentor will guide you through all the aspects of research and aid you in the preparation of your dissertation proposal to submit to the dissertation committee. The dissertation committee is comprised of three full-time XXX faculty members who approve your dissertation content (proposal) and administer the defense of your dissertation.

Research shows that over half of all doctoral students fail to complete their degree; most finish their coursework but become overwhelmed with the dissertation

process. This program is designed to allow the student to have continuous mentoring and support throughout degree progression by your local tenured professor.

The PAT DBA enhances your critical thinking and analytical skills, while developing your competence in conducting and understanding research, that are necessary for effective university teaching.

The DBA dissertation is comprised of significant research in your chosen area of expertise. While the dissertation is not based on a requirement to produce an original contribution to the body of knowledge in Business Administration, your dissertation will contribute to the profession. The expectation is that the dissertation will be able to directly translate, without additional research, into two published articles. The articles should be submitted to a refereed academic journal and at least one publication accepted by a respected professional publication.

The advantages to this concept program are numerous. The student gets hired at a participating university as an AACSB Professionally Qualified Assistant Professor making approximately $40,000 a year. The student works directly with a full Professor, as a mentor, throughout the entire program, but specifically during the two research courses. The mentoring professor receives a $1,000 stipend from the student's tuition for each of the two research courses. The participating university gets a Professionally Qualified professor to teach, while having two instructors working on research who can enhance the university's research agenda. The host university gets a motivated student who will complete the program, pay tuition, and will not require additional faculty members to be hired, and will not need to provide students with tuition waivers or department/university fellowships.

Program of Study:

The program of study requires 60 graduate credits beyond the master's degree distributed as follows: 12 credit hours in research methods, 33 credit hours in core courses, 3 credit hours in comprehensive exam course, 12 credit hours of dissertation.

Research Methods: (12 credits)

RM 701 Action Research - 3 Credits

RM 702 Qualitative Methods - 3 Credits

RM 703 Quantitative Methods I - 3 Credits

RM 704 Quantitative Methods II - 3 Credits

Core Courses: (33 credits)

CC 710 Business Ethics - 3 Credits

CC 711 Strategic Planning - 3 Credits

CC 712 Human Resource Management - 3 Credits

CC 713 Managing Innovation and Technology - 3 Credits

CC 714 Leadership and Organizations - 3 Credits

CC 715 Crisis Management - 3 Credits

CC 716 Teaching Internship - 3 Credits

CC 717 Research Project/with Mentor I - 3 Credits

CC 718 Research Project/with Mentor II - 3 Credits

CC 719 Managerial Communications - 3 Credits

CC 720 Corporate Social Responsibility - 3 Credits

Comprehensive Exam: (3 credits)

CE 750 Comprehensive Exams: Students will complete two written comprehensive exams, one in research methods and one from the core area.

Dissertation: (12 credits)

Course Descriptions:

RM 701 Action Research: The course advances the proposition that the action research approach is a useful paradigm in the field and worthwhile model for dissertation work. Historical, philosophical, and theoretical foundations will be discussed, but practical application will be the primary focus simultaneously with learning. This is consistent with an action research approach. Collaboration and group work is also a hallmark of action research so students will demonstrate their abilities to design, diagnose, plan, implement, observe, and reflect in cooperation with classmates. The various roles and skills necessary to be an effective action researcher will be discussed, as well as important issues related to empowerment, contextualization, ethical considerations, and validity.

RM 702 Qualitative Methods: This course introduces the assumptions, theories, and processes of qualitative inquiry. The purpose of this course is to provide advanced graduate students with the theoretical foundations necessary to understand qualitative inquiry, and to enhance their abilities to conduct qualitative research and evaluation.

RM 703 Quantitative Methods I: Introduction to quantitative decision procedures under uncertainty. Applications of descriptive statistics, probability models, simulation models, interval estimates, and hypothesis testing to management problems. Managerial-oriented cases are used in instruction.

RM 704 Quantitative Methods II: A continuation of Quantitative Methods I. Applications of regression procedure, forecasting technique, and statistical design of experiment method to management problems. Managerial-oriented cases are used throughout the course.

CC 710 Business Ethics: Ethics and social responsibility are terms frequently applied to businesses often in the context of describing the lack of them. This course explores the responsibilities of a business, and to whom it is responsible. It includes the current laws and applications pertaining to the Americans with Disabilities Act (ADA), the Family and Medical Leave Act, and regulatory agencies for workplace responsibility (i.e., FDA and OSHA). It also investigates how business ethics affect the employee, firm, consumer, and society.

CC 711 Strategic Planning: Drawing upon a wide range of disciplines, this course explores theory, research, and practice in corporate and business strategy focusing on the determinants of firm performance and results. Building on the focus of the doctoral program, doctoral students will gain an in-depth understanding of how to create, execute, and measure strategy effectiveness and business results. The course will develop critical and conceptual thinking skills by understanding the interplay of industry structure, competitive environments, organizational resources, competitive advantage, leadership, corporate structure, globalization, talent development, and uncertainty. By applying concepts to case studies, analytical problem-solving, business judgment, financial analysis, and synthesis will be refined.

CC 712 Human Resource Management: Focuses on the development and maintenance of effective personnel policy in the modern organization. Topics include

methods and techniques of job analysis, manpower planning, recruiting and selection, training and development, compensation, performance appraisal, and legal guidelines and compliance requirements. Stresses application of personnel management to achieving overall organizational goals.

CC 713 Managing Innovation and Technology: Develops skills in managing the mismatch between technological possibilities and market demand and underscores management of technology and innovation as managerial problem solving. Emphasizes organizational behavior relating to the innovative process at all levels within organizations. Covers close collaboration between R&D and other functional areas and collaboration across firms, technological and innovative needs of the firm over time, organizational adaptation to innovation, and technological change. Integrates the roles of each level of the organization.

CC 714 Leadership and Organizations: Expands the horizons of professional vision through the study of current concepts and perspectives in management and organizational leadership. Focuses on the needs of corporations and the realities of executive work in a changing environment. Explores relevant topics from a multidisciplinary viewpoint.

CC 715 Crisis Management: There are daily news reports about yet another business stumbling into a crisis and almost every crisis contains the seeds of success, as well as the roots of failure. This course explores how to manage business crises, how best to avoid them, and what to glean from the experience.

CC 716 Teaching Internship: Appropriate foundational, cognate, and major area coursework and consent of the advisor and instructor. This is a culminating experience primarily for Sixth Year and Doctoral students.

CC 717 Research Project/with Mentor I: This course requires the learner to conduct a research study on a current topic which relates to the fundamental areas of business administration (general management/human relations, finance, and marketing) and to document the results in a formal project report.

CC 718 Research Project/with Mentor II: This course requires the learner to conduct a research study on a current topic which relates to the fundamental areas of business administration (general management/human relations, finance, and marketing) and to document the results in a formal project report.

CC 719 Managerial Communications: This course presents the basic theories, skills, and applications related to communications in an organizational setting from a manager's point of view. The course focuses on the consistent, logical process approach that can be used to solve many communication problems. The course also covers topics that are essential to contemporary business communications, including critical thinking, the Internet, the World Wide Web, email, and other technological communication tools. It also presents basic theories, skills, and applications required to effectively communicate in a complex organizational setting emphasizing a manager's point-of-view.

CC 720 Corporate Social Responsibility: This graduate course provides an in-depth review and analysis of the latest theories and research on corporate social responsibility. The course focuses on understanding governmental and quasi-governmental regulatory institutions and related corporate social responsibility

business impacts; an understanding of the process of developing corporate social responsibility standards and policies, how to interpret them, and how to determine relative weight; and an understanding of how to assess, deal with, and prevent corporate social responsibility risks. Emphasis includes working with and being a team leader and in collaboration. Communication projects will focus on critical thinking, problem solving, and decision making based on relevant research, information literacy, applied technology, integration, ethical and diversity concerns. Attention is focused on utilizing leadership and collaboration practices in corporate social responsibility within an organization, an industry, country, region, and world.

Program Timeline:

Suggested Course Sequence for Doctoral Students

	FALL	SPRING	SUMMER
1st YEAR	RM 702 RM 703 CC 716	RM 704 CC 711 CC 721	RM 701 CC 712 CC 713
2nd YEAR	CC 714 CC 717 CC 719	CC 715 CC 718 CC 720	CE 750 Exams
3rd YEAR	Dissertation		

***Tentative schedule are subject to change**

Admission requirements:

- A master's degree in business or a related field from a regionally accredited institution or an appropriately certified foreign institution
- A grade point average of at least 3.0 (on a scale of 4.0) in work leading to the master's degree, and in any subsequent graduate study
- Completed Application for Admission
- $50 Application fee (non-refundable)
- Documentation of current employment with or access to a professional organization
- Official transcripts from all graduate schools attended
- Personal and professional goal statement

Required Documentation:

- Official transcripts from all institutions that granted credits toward the Master's degree and all credits earned post-master's degree. (basis can be evaluated on unofficial transcripts)

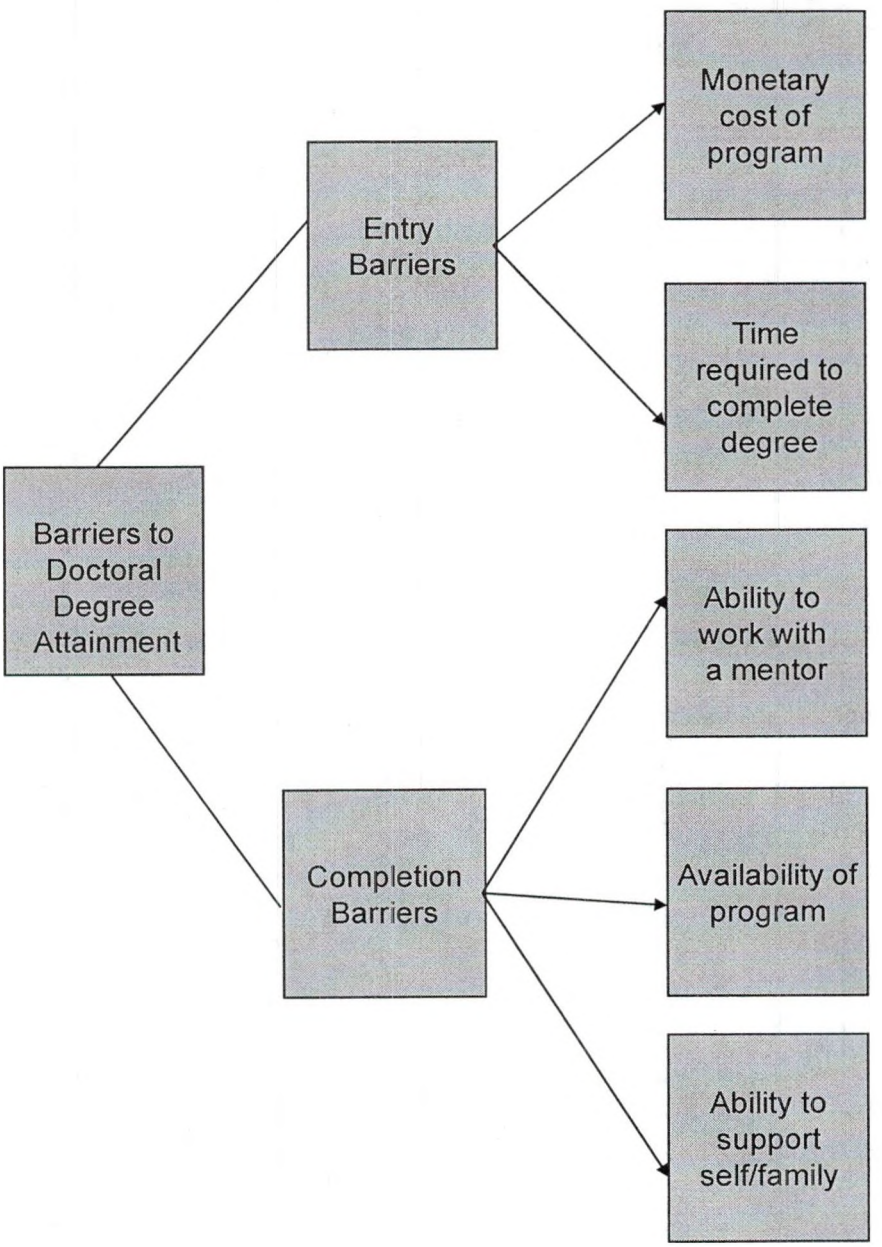
Transfer Credits:

You may transfer up to 9 credit hours from post master's courses, based on approval of the Graduate School.

Tuition and Fees:

Tuition: Per Credit	$400
Books/per course:	$100
Semester Technology Fee:	$90
Application Fee (non-refundable):	$50
Graduation Fee:	$150
Returned Check Fee:	$35

Appendix B
Air Force Commanders and Doctoral Degree Survey Constructs



Appendix C
Air Force Commanders and Doctoral Degree Survey

Air Force Commanders and Doctoral Degrees

Please take a minute to complete the survey below. I appreciate your time and willingness to help understand PAT Program interest among Air Force Commanders

Please circle the correct response below.	Please circle the correct response below.
Would you be interested in a program like this?	**I would like to teach at a college/university after I retire from the Air Force.**
YES NO	YES NO
Gender	**Rank**
MALE FEMALE	LT COL COL

	Please answer the following questions like you would be interested in a program like this.	Strongly Disagree	Disagree	Some What Disagree	Some What Agree	Agree	Strongly Agree
1.	I am willing to spend the money necessary to earn a doctoral degree.	1	2	3	4	5	6
2.	I could afford to spend $1,000 month on my education.	1	2	3	4	5	6
3.	I would be willing to do this program for three years at a salary of $40,000 to obtain an $80,000/yr job.	1	2	3	4	5	6
4.	I feel this program is a worthy financial investment.	1	2	3	4	5	6
5.	I would be interested in a program that allows me to complete a DBA in nine semesters (3 years).	1	2	3	4	5	6
6.	In order to complete a doctoral degree I would be willing to take three classes per semester and continue to maintain employment for 3 years.	1	2	3	4	5	6
7.	Completing a doctoral degree in minimal time is important to me.	1	2	3	4	5	6
8.	This program is designed to help me complete my degree in a reasonable amount of time.	1	2	3	4	5	6
9.	I am willing to accept teaching/career/research guidance from a mentor.	1	2	3	4	5	6
10.	I am confident in my ability to learn how to conduct scholarly research from a mentor.	1	2	3	4	5	6
11.	I am confident in my ability to foster a relationship with a mentor.	1	2	3	4	5	6
12.	This program fosters my academic education through mentoring.	1	2	3	4	5	6
13.	I have successfully completed a PME course on-line.	1	2	3	4	5	6
14.	I have the self-discipline necessary to complete an on-line program.	1	2	3	4	5	6
15.	I am comfortable taking on-line classes.	1	2	3	4	5	6
16.	I feel this program was designed for someone like me.	1	2	3	4	5	6
17.	Assuming I collect my AF retirement pay and $40,000/yr and assistant professor pay, I can meet my financial obligations.	1	2	3	4	5	6
18.	I could afford to spend $1,000 month on education.	1	2	3	4	5	6
19.	I would be willing to spend $1,000 month for 36 months in this program.	1	2	3	4	5	6
20.	This program provides sufficient financial support to maintain an acceptable standard of living.	1	2	3	4	5	6

Appendix D
Entry Barrier of Monetary Cost of Program

Question 1: I am willing to spend the money necessary to earn a doctoral degree. See Figure 7.

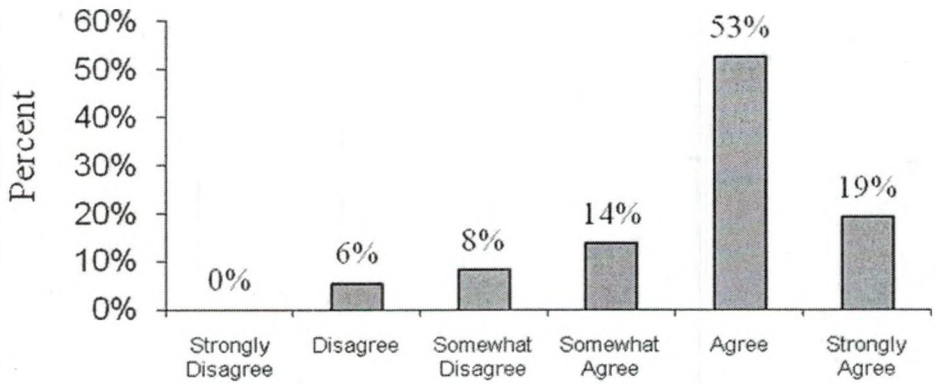


Figure 7. I am willing to spend the money necessary to earn a doctoral degree.

Question 2: I could afford to spend $1,000 month on my education. See Figure 8.

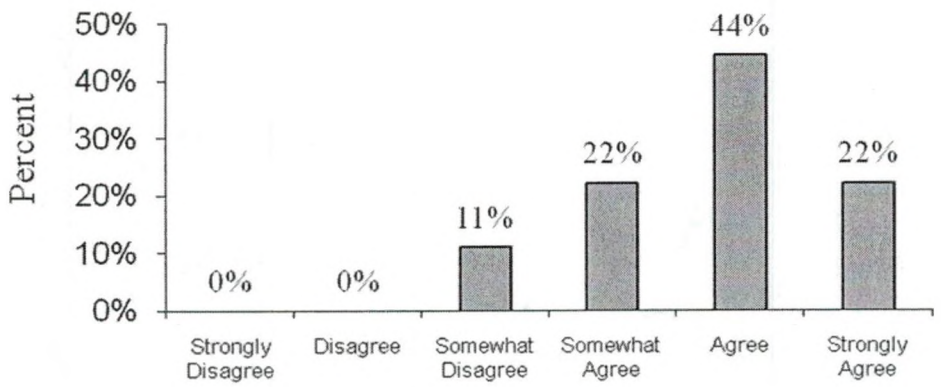


Figure 8. I could afford to spend $1,000 month on my education.

Question 3: I would be willing to do this program for three years at a salary of $40,000 to obtain an $80,000/yr job. See Figure 9.

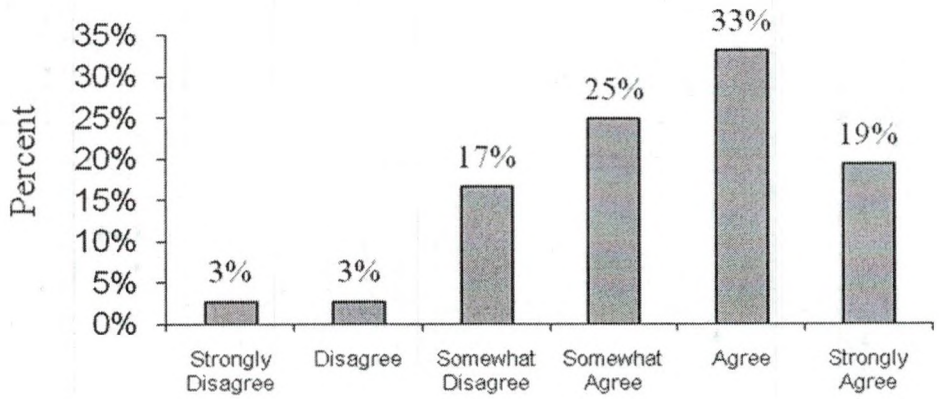


Figure 9. I would be willing to do this program for three years at a salary of $40,000 to obtain an $80,000/yr job.

Question 4: I feel this program is a worthy financial investment. See Figure 10.

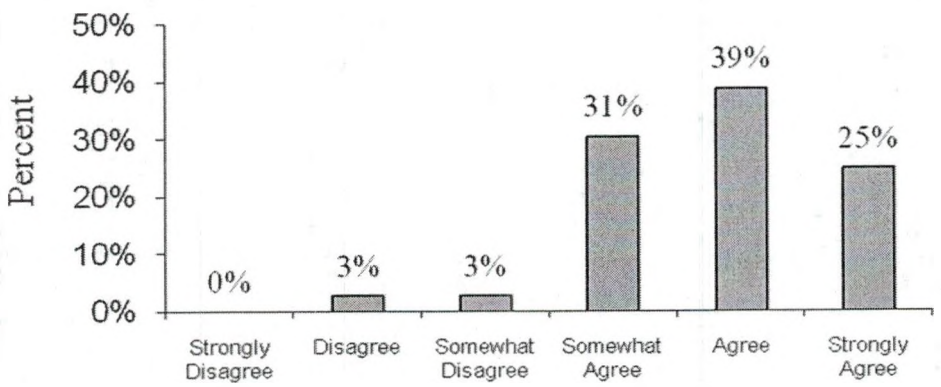


Figure 10. I feel this program is a worthy financial investment.

Appendix E
Entry Barrier of Time Required to Complete Degree

Question 5: I would be interested in a program that allows me to complete a DBA in nine semesters (3 years). See Figure 11.

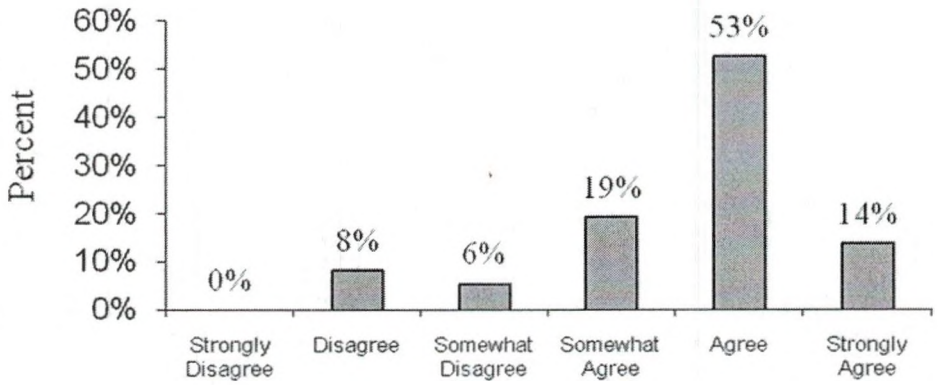


Figure 11. I would be interested in a program that allows me to complete a DBA in nine semesters (3 years).

Question 6: In order to complete a doctoral degree I would be willing to take three classes per semester and continue to maintain employment for 3 years. See Figure 12.

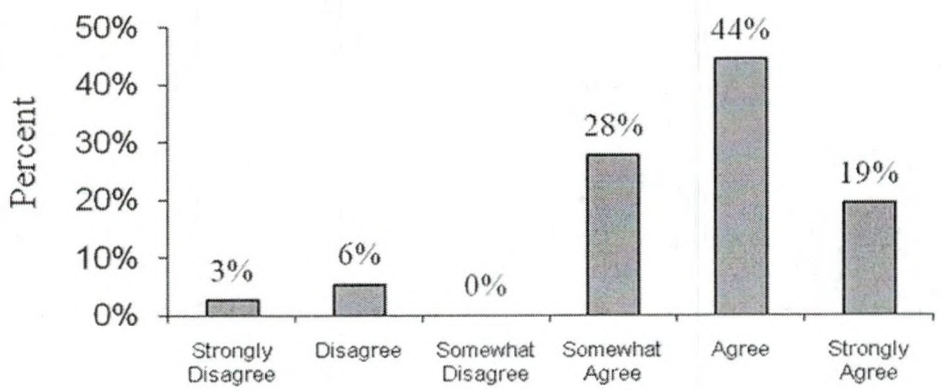


Figure 12. In order to complete a doctoral degree I would be willing to take three classes per semester and continue to maintain employment for 3 years.

Question 7: Completing a doctoral degree in minimal time is important to me. See Figure 13.

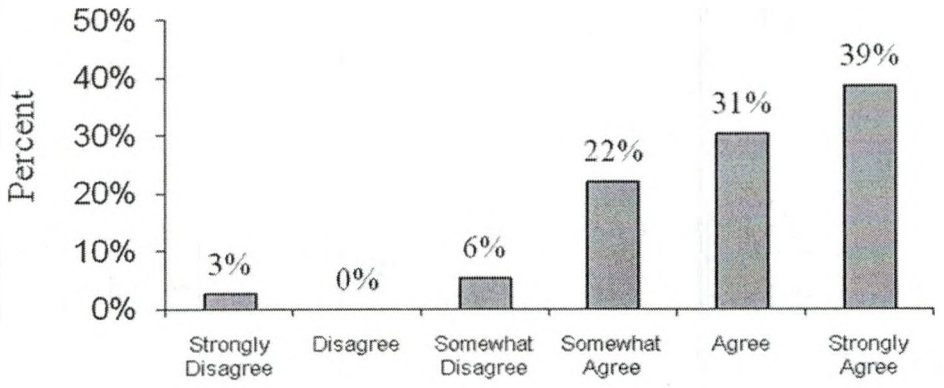


Figure 13. Completing a doctoral degree in minimal time is important to me.

Question 8: This program is designed to help me complete my degree in a reasonable amount of time. See Figure 14.

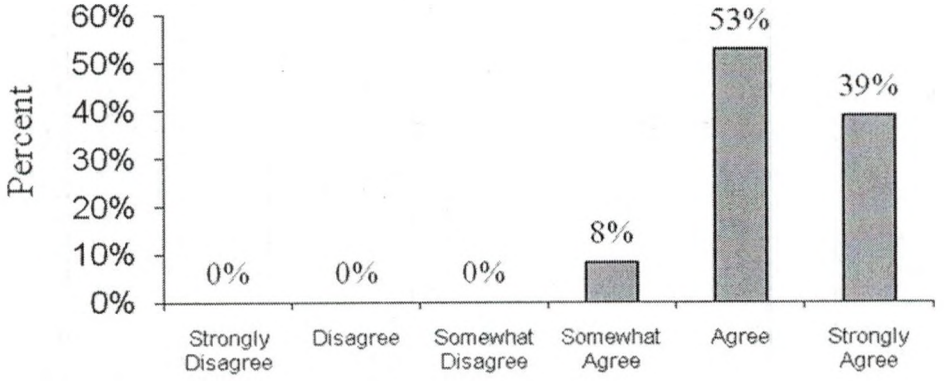


Figure 14. This program is designed to help me complete my degree in a reasonable amount of time.

Appendix F
Completion Barrier of Ability to Work With a Mentor

Question 9: I am willing to accept teaching/career/research guidance from a mentor. See Figure 15.

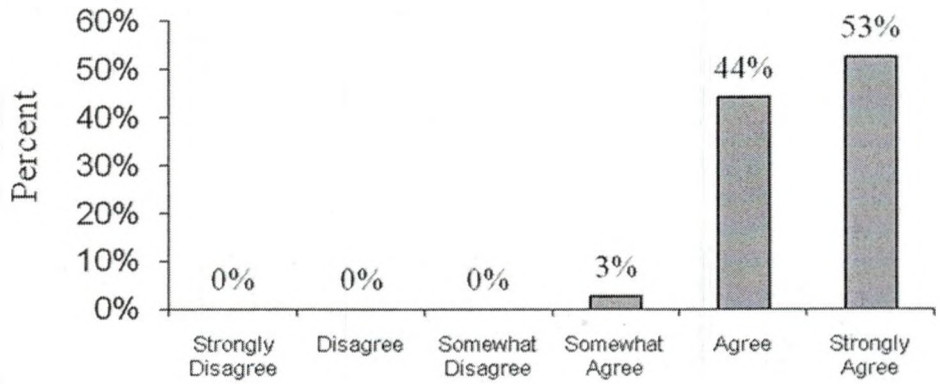


Figure 15. I am willing to accept teaching/career/research guidance from a mentor.

Question 10: I am confident in my ability to learn how to conduct scholarly research from a mentor. See Figure 16.

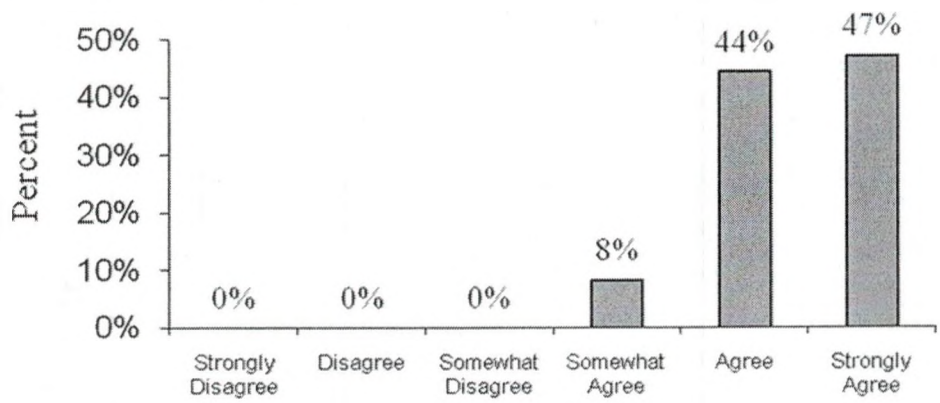


Figure 16. I am confident in my ability to learn how to conduct scholarly research from a mentor.

Question 11: I am confident in my ability to foster a relationship with a mentor.

See Figure 17.

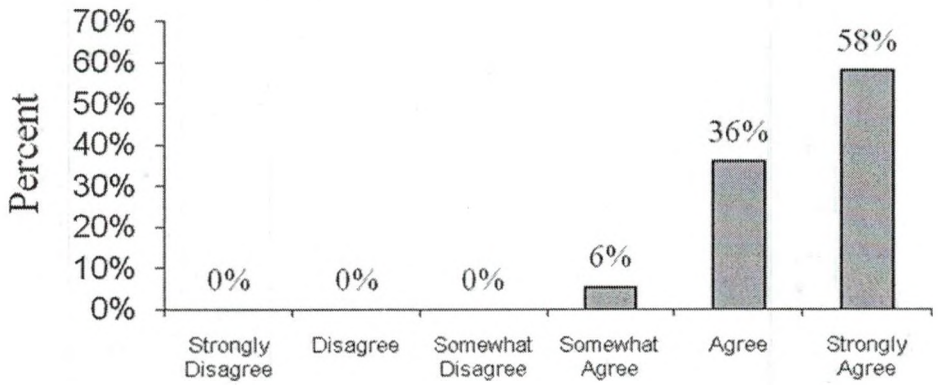


Figure 17. I am confident in my ability to foster a relationship with a mentor.

Question 12: This program fosters my academic education through mentoring.

See Figure 18.

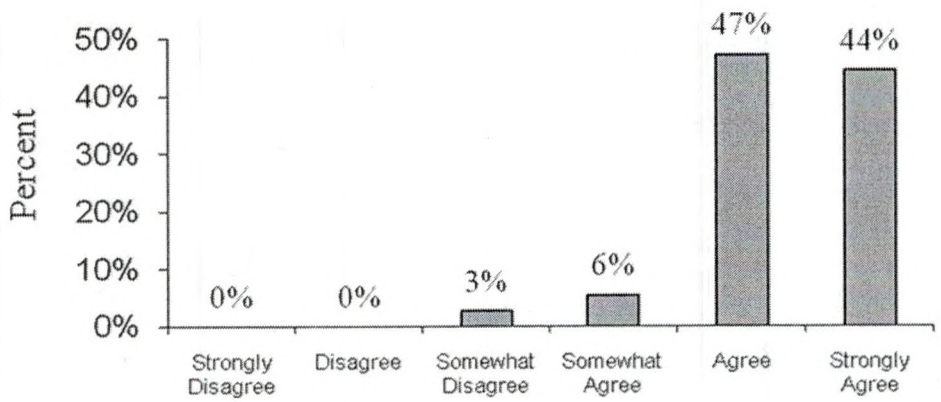


Figure 18. This program fosters my academic education through mentoring.

Appendix G
Completion Barrier of Availability of Program

Question 13: I have successfully completed a PME course on-line. See Figure 19.

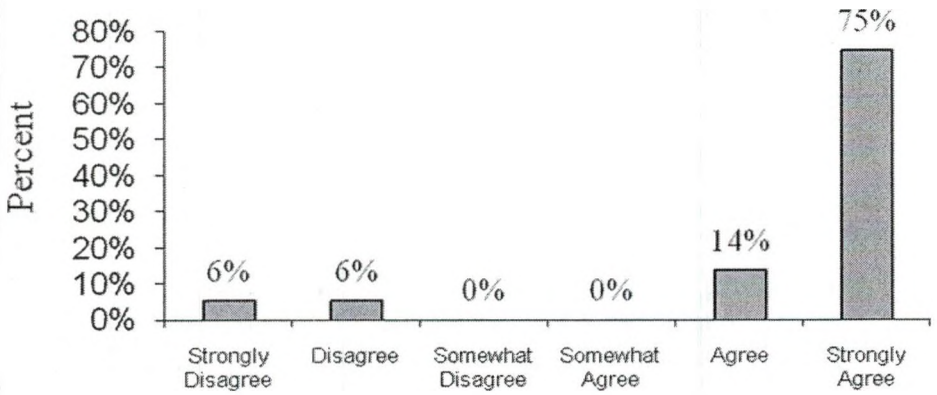


Figure 19. I have successfully completed a PME course on-line.

Question 14: I have the self-discipline necessary to complete an on-line program. See Figure 20.

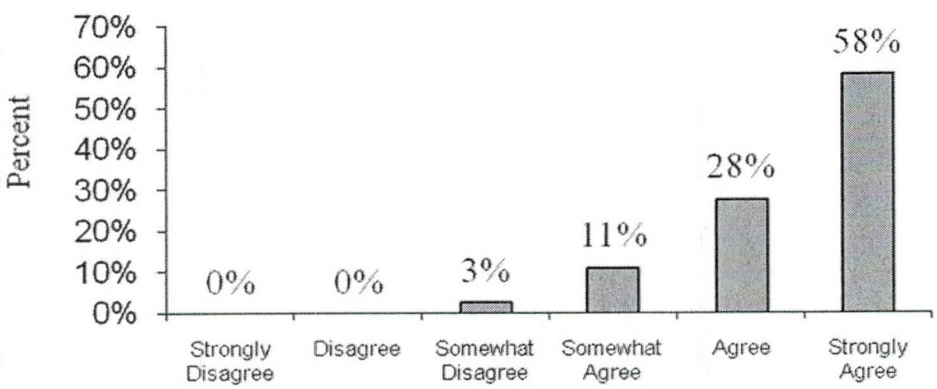


Figure 20. I have the self-discipline necessary to complete an on-line program.

Question 15: I am comfortable taking on-line classes. See Figure 21.

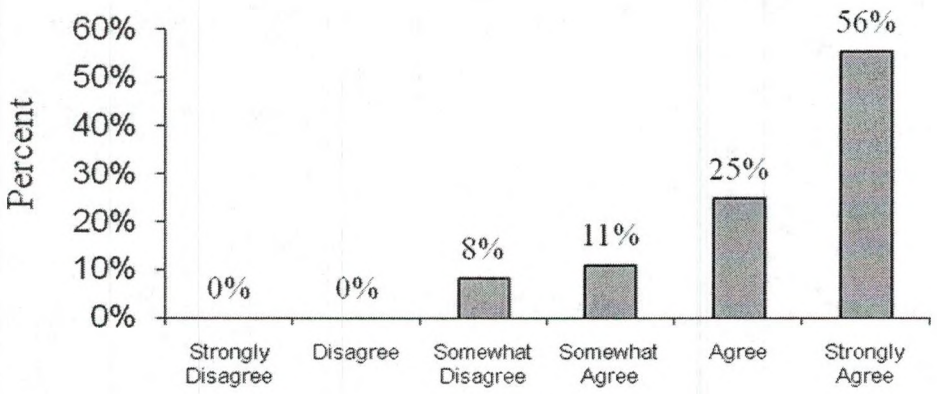


Figure 21. I am comfortable taking on-line classes.

Question 16: I feel this program was designed for someone like me. See Figure 22.

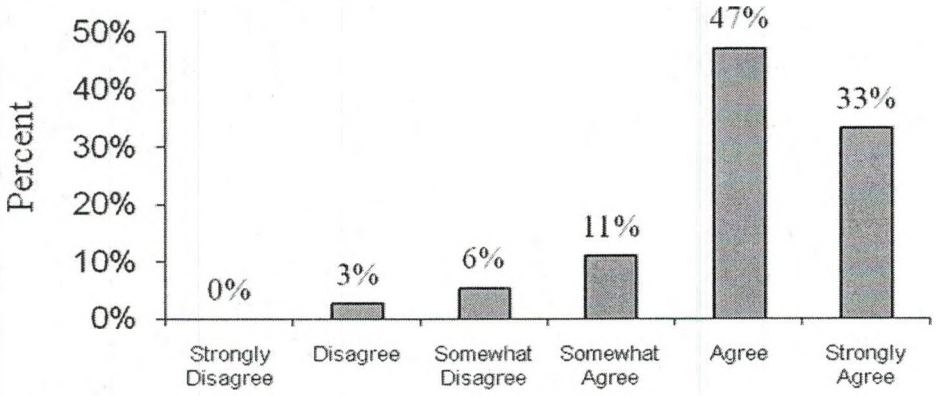


Figure 22. I feel this program was designed for someone like me.

Appendix H
Completion Barrier of Ability to Support Self/Family

Question 17: Assuming I collect my AF retirement pay and $40,000/yr and assistant professor pay, I can meet my financial obligations. See Figure 23.

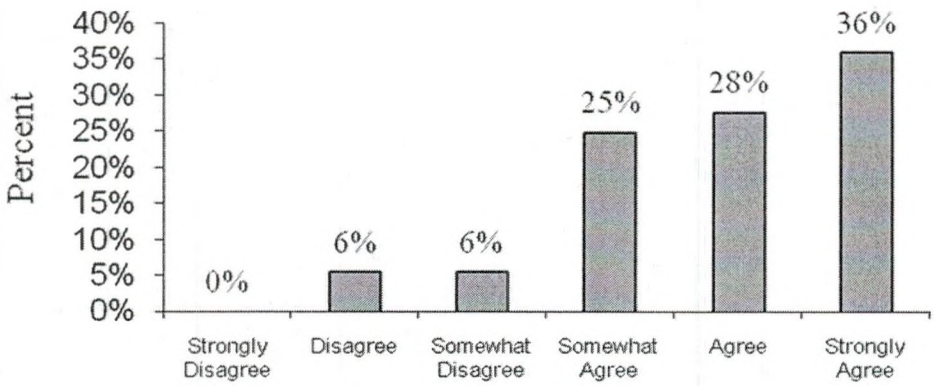


Figure 23. Assuming I collect my AF retirement pay and $40,000/yr and assistant professor pay, I can meet my financial obligations.

Question 18: I could afford to spend $1,000 month on education. See Figure 24.

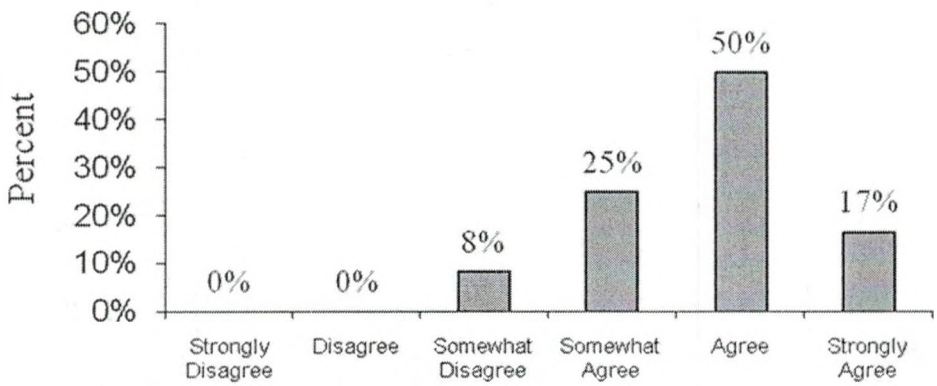


Figure 24. I could afford to spend $1,000 month on education.

Question 19: I would be willing to spend $1,000 month for 36 months in this program. See Figure 25.

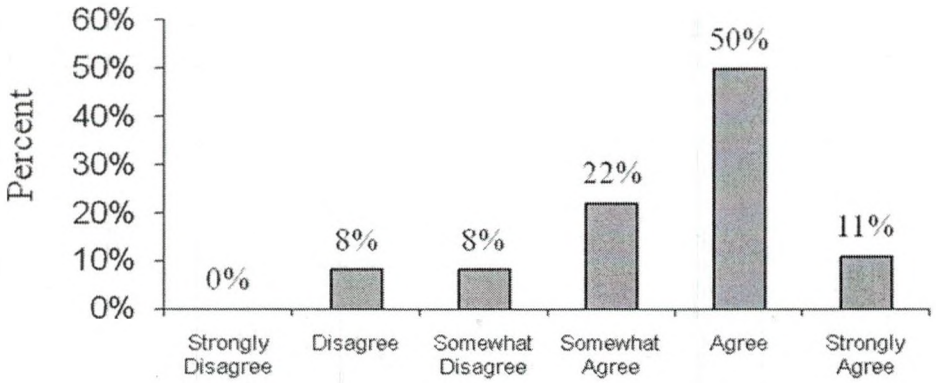


Figure 25. I would be willing to spend $1,000 month for 36 months in this program.

Question 20: This program provides sufficient financial support to maintain an acceptable standard of living. See Figure 26.

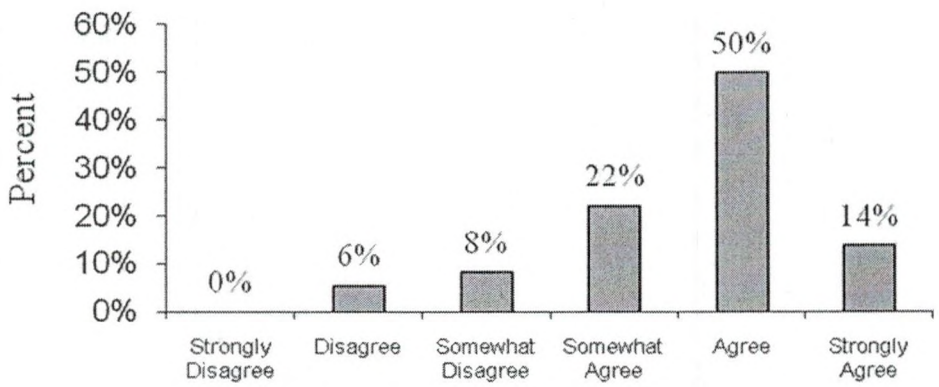


Figure 26. This program provides sufficient financial support to maintain an acceptable standard of living.

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