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UNINTENDED CONSEQUENCES: LESSONS LEARNED WHEN STARTING A LOGISTICS & TRANSPORTATION DOCTORAL PROGRAM

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ABSTRACT

Many universities evaluate the costs and benefits of academic programs. An important decision is whether to offer a doctoral degree. Most articles and academics focus on the numerous benefits of a doctoral program. While many of the benefits that can stem from a doctoral program are summarized in this manuscript, the primary purpose is to highlight some of the hidden costs to creating and operating a doctoral program. The authors use their experience in developing a doctoral program in Logistics and Transportation to illustrate many of these potentially hidden costs. This should provide academics and administrators with better information to make future choices about specific Business School programs.

INTRODUCTION

Currently approximately 21% of the Colleges of Business accredited by the Association to Advance Collegiate Schools of Business (AACSB, 2012) offer a doctoral program in some area of business. This list of universities contains some of the most prestigious institutions in the world. In fact, a review of current faculty job postings at AACSB universities indicates that these schools often require applicants to have a degree from another AACSB university to be considered for the position. With such a limited pool of doctoral granting universities to choose from many, if not most, of these new academics will begin their career at institutions that have not traditionally offered a doctoral degree. With most academics backgrounds coming from research universities, there is a natural trend for teaching or hybrid universities to evaluate the benefits of including at least one doctoral program at their university. There are many obvious benefits to including a doctoral program: prestige, research opportunities, use of Ph.D. students as

instructors, creating assistant professor candidates, funding possibilities, etc. However, there are many costs that must also be addressed as part of an effective evaluation process.

Effectively evaluating the benefits and costs of adding a doctoral program is a challenge for most academic decision makers. Often, many unintended consequences of the decision result in costs (both financial and psychological) that are not anticipated during the evaluation process. The failure to incorporate a realistic estimate of the short-term and long-term costs of establishing and running a doctoral program within a business school is normally not due to malicious intent, but rather is due to lack of awareness of hidden challenges. The reality of under taking such a complex task is that there can be second or third order effects that are not obvious during an initial planning period.

The goal of this article is to highlight some of the hidden challenges that a College of Business should consider when beginning a doctoral program. While the paper will present a

theoretical underpinning for conflicting views of the benefits and costs of adding a doctoral program, this manuscript is unique in that illustrative examples will be taken from actual events seen in the recent establishment of a doctoral program in a traditional College of Business environment. For the past five years the authors of this manuscript have been participant observers in the development of a doctoral program at their institution; Georgia Southern University. The intent of this manuscript is to use insights gained from that experience to better prepare academics and administrators with concrete examples of the hidden costs of a doctoral program to allow better evaluation and more realistic expectations. The result should be that colleges are better prepared to make the doctoral decision. The goal is not to discourage any university from starting a doctoral program, but rather to increase their understanding of the true costs of the process. The aim is to help schools better implement new doctoral programs and have more success with the development.

To achieve these goals, this article will present a modified literature review to include some relevant data on current doctoral programs and present some of the benefits and costs of such a program. Then, the authors will include the theoretical basis that shapes the decision process. The discussion of the unintended consequences or hidden costs provides a detailed evaluation of challenges that a College should include in the decision process and prepare to address upon adoption. Next, a theoretical model is developed to highlight the challenges of this process. Finally, some key conclusions tie together the key learning points.

LITERATURE REVIEW

As part of any go/no-go program decision, the competitive market should be evaluated. Using the AACSB data as a baseline, one surprising finding was just how few institutions offer doctoral degrees. Currently, AACSB includes 1,270 member institutions. Clearly, this is not a

complete or all-encompassing list of business schools. In fact, in North America, AACSB schools represent less than 60% of total institutions, while outside of North America, AACSB membership is generally less than fifteen percent (AACSB, 2012). Another widely circulated list from the *US News & World Report* lists over 1,600 business schools in the United States (USN&WR, 2012). Regardless of which number is used as a baseline, it is interesting to note that AACSB identifies only 267 Colleges of Business that have a doctoral program or approximately 21% of AACSB member universities. Therefore, the total number of doctoral programs is relatively small. This may be the first indicator of the numerous costs associated with providing doctoral degrees. In addition to the small numbers of programs, a review of the last five years of AACSB records indicates only a handful of new doctoral programs admitted to the membership ranks. The lack of significant growth of doctoral granting universities may highlight some recognition of the challenges of starting a program. However, there are significant advantages to housing a doctoral program within a College of Business as well.

The first major benefit of a doctoral program is prestige. Clearly, the vast majority of doctoral granting universities are considered the premier universities. A look at any ranking system seems to be headed by the traditional research universities that support doctoral education as a key component of the overall educational outcomes. Part of the reputation of these universities is that they are producing first-rate graduates at all levels. Furthermore, their doctoral graduates go on to teach at other universities. If the required “certification” to be a professor is a doctoral degree, then the universities that produce doctoral graduates are the de facto top of the academic pyramid. The presence of multiple doctoral degrees is a visible measure of the prestige of the College of Business. A second key benefit is the increased amount of research output from a doctoral program. In most cases, the ability of a doctoral

candidate to interview and secure an Assistant Professor position is directly related to his/her quality and quantity of research produced during the degree process. Therefore, the host institution benefits from increased scholarly production both from the doctoral candidates and the existing faculty. This further increases the prestige of the College (Gammelgaard, 2001). Another key point from Gammelgaard's research was the benefit to *both* faculty members and students from small classes and/or one-on-one instruction that is typical of doctoral instruction. Participating faculty have an in-load class with 3-5 students typically and this can be perceived by other faculty as very attractive, although the classes can be very demanding on faculty time. An additional benefit is that most Ph.D. students teaching classes can be considered "academically qualified" under AACSB rules. Another benefit of the doctoral program is that it may create opportunities beyond the university. Often, the requirement for doctoral students to gather data for their research spurs faculty to expand their relationships to industry. By increasing interactions with practitioners, universities often identify additional opportunities to generate revenues through projects, executive education or closer ties leading to increased donations. A different set of benefits occur due to the typical structure of dissertation committees. Most institutions require committees to include at least one "outside" member. This opportunity to work with others outside one's discipline often leads to sharing different concepts and techniques. This cross discipline pollination of thought should improve both disciplines as they conduct doctoral research. While there are other advantages to having a doctoral program, the key benefits highlighted present strong arguments to consider implementing such a program.

In addition to the benefits, there are additional factors that may influence universities when considering the introduction of a doctoral program. The pressures to offer doctoral education can be both internal and external. Internal stakeholders may wish to have a

doctoral program(s) due to the many benefits previously highlighted. For example, administrators may wish to increase the prestige of their university, while professors may want to boost their research output. Further, new areas of research or disciplines may be identified in which there may be a "PhD gap." In other words, as new disciplines emerge (e.g., Supply Chain Management – SCM) there is an opportunity to be the university that produces doctoral degrees in the emerging field. In turn, new programs, such as the aforementioned SCM degree, tend to stimulate the need for additional faculty lines to support the additional requirements posed by the new degree and help grow a discipline area.

There are also external factors and a large number of stakeholders that may also apply pressures to start a doctoral program as well. For example, alumni may enjoy the increased prestige of their university, while taxpayers may see additional jobs and economic benefits from increased programs within a College of Business through service types of support and new jobs. In addition, successful implementation of a doctoral program would produce qualified future faculty that may be required to address shortages in a statewide system (i.e., a lack of Assistant Professors at other universities across a state system.)

THEORETICAL FRAMEWORK

There is solid theory that may help to explain the steps in deciding to offer a doctoral program. While the point of this article is to provide background and information to doctoral program decision makers, the theoretical basis helps to explain the process. There are two significant theories that are appropriate to the doctoral program development process. Interestingly, the two theories support opposing positions on whether a university is more or less likely to begin a doctoral program.

The first relevant concept, Prospect Theory, supports the creation of a doctoral program due

to its potential benefits. Kahneman and Tversky first developed prospect theory in the late 1970s (1979). Their Nobel winning work noted that the risk to reward relationship could be identified and calculated in various economic situations. Further research included various studies that expanded the concept to incorporate areas as far ranging as behavioral economics to military/foreign policy decisions (Lynn, 1999). One of the key points of later research is that the gains and losses are not always valued equally. Gains appear to be given higher weights and will favor changes versus preserving the status quo in decision making (Steinacker, 2006). Therefore, the application of Prospect Theory implies that decision makers are likely to be more positively influenced to implement a doctoral program due to the unequal weightings and accentuation of positive impacts from a potential degree program.

Conversely, Neo-Institutional Theory states that organizations are resistant to change and are less likely to create a doctoral program. The basis of this theory began with Weber in the late 1800s as he examined the growth and interaction of bureaucracy and institutions. By the late 1980s, the specific area of Neo-Institutional Theory had developed as the area matured. A complete discussion of the concepts is beyond the scope of any one paper, but DiMaggio and Powell provide an excellent examination (1991). One of the key points of Neo-Institutional Theory is the resistance to change present in many smaller organizations (Diego et al, 2002). Whether it is an academic department or a university wide evaluation to begin a doctoral program, these are relatively small organizations. Therefore, there is a natural reluctance to change established structure or organization. This generates pressure against creating a doctoral program within existing departments or colleges.

Thus, the competing theories generate simultaneous pressures to both maintain the status quo and to begin a doctoral program. The impact of each of these independent forces will play a significant role in determining whether an

institution will push forward with a doctoral degree. In addition to the forces from these theories, the strength of the negative impacts of beginning a doctoral program will play a critical role in the final decision.

CONSEQUENCES OF STARTING A PH.D. PROGRAM

To this point, the foundation of the paper has built upon the background or positives of a doctoral program and the theory that will influence the decision process. However, the key discussion or focus of the paper is the consequences of beginning such a program. There are clear disadvantages or negatives to incorporating one or more doctoral degrees within a College of Business. Many of these difficulties are easily identifiable and are addressed in this section. However, there are also a large number of hidden challenges that occur once a university begins to deliver the doctoral degree. To help understand those costs, the authors will detail some of the unexpected costs that emerged in the development of the doctoral program recently established at Georgia Southern University.

Georgia Southern University is described on its web site as “a Carnegie Doctoral-Research university providing the classic residential campus experience. Georgia’s largest and most comprehensive center of higher education south of Atlanta, 50 states and 101 nations are represented in the student body. The University’s hallmark is student-centered education for undergraduate and graduate students alike” (GSU, 2012). The College of Business Administration at Georgia Southern has approximately 4,500 students and continues to maintain AACSB accreditation. The University chose Logistics and Supply Chain Management as the first Ph.D. program in the mid 2000’s. This was a logical choice as the initial program since the Southern Center for Logistics and Intermodal Transportation has a national reputation and the University is located near one of the busiest logistics corridors in the

nation with the Port of Savannah within 45 miles. All of these structural benefits of beginning a program at Georgia Southern helped to drive the process of beginning a doctoral program. However, neither the faculty members nor administration anticipated many of the negative issues that resulted from implementing a doctoral degree.

Financial Costs

To begin with the more obvious disadvantages, the single greatest challenge is cost. There are a myriad of directed and indirect financial costs with the doctoral program. The first cost is for the faculty and resources required to offer doctoral classes. At Georgia Southern University, the administration's goal was to admit approximately ten doctoral students per year. This is a very expensive proposition since it is also likely to be the most senior, and likely highest paid, faculty members teaching these classes. Even if new faculty members are used, with salary compression in today's market, the return on credit hour production is nearly prohibitive. The second portion of the increased cost is the likely need for new faculty members. This could be due to a number of reasons: additional new classes, required area(s) of technical expertise, or tenured faculty to lead dissertations. There also will be a need for additional faculty to cover the undergrad/MBA classes that the Ph.D. faculty would have been teaching. Regardless of the rationale, one to three new faculty lines are a reasonable expectation. At Georgia Southern University, the new doctoral program required three lines (one in Operation Management to offset minor area courses and two in Logistics and Transportation for additional new doctoral classes.) A third potential cost is due to teaching loads. The most engaged doctoral faculty members face a large number of additional tasks that are beyond the traditional Bachelors and Masters level classes. The most obvious are increased research expectations and dissertation responsibilities. Therefore, a reasonable expectation is that these faculty members will have similar teaching loads as peers at

traditional research universities. A realistic teaching load for these individuals would be some form of a two classes a semester approach or a two-two teaching load. This may or may not be a significant reduction from the current load; however, most non-Doctoral Colleges of Business are more hybrid or teaching institutions. In those cases, a three-three or even a four-four load per semester may be the normal situation. Therefore, there would be a significant cost that may be realized in a greater number of new lines required to replace those classroom hours. The final set of costs is the doctoral students themselves. First, they are likely to be on full scholarships or fellowships while in the program. Depending on the university's accounting system, this may be a real dollar expense if the College of Business is required to transfer resources to another unit (e.g., College of Graduate Studies) or merely an internal cost associated with tuition waivers. The second cost for the students is their stipend. Even with a low cost approach, \$15,000 per student is a very conservative estimate in outflow of capital to the student(s). Students also often need to be supported in the summer with additional research funding. This amount can quickly escalate as the program reaches years two and three and has multiple students participating simultaneously in the process. In short, it can quickly surpass \$100,000 annually. Universities should reasonably budget a minimum of \$25,000 per doctoral students for stipends and miscellaneous costs per year.

In addition to the direct costs, there are many hidden costs to be considered when evaluating the merits of starting the doctoral program. The unintended financial costs are likely to be smaller amounts, but are a litany of various items that every doctoral program needs to operate. The first is library reference materials. The shift from a hybrid or a teaching university implies a greater need for library research tools. Over the decade prior to starting the doctoral program at Georgia Southern University, the library had reduced subscriptions to physical/online journals and databases. The cost to

restart ABI Inform was significant and was exacerbated by the inability to purchase just the business content areas. In addition, software licenses may represent another cost. To properly teach modern statistical techniques, programs such as AMOS must be licensed to use in the classroom labs and/or on students' computers. Another significant, one-time cost may be the establishment of a doctoral classroom with appropriate technology for seminar types of classes. Next, travel budgets will likely be significantly increased for both faculty members and doctoral students/candidates. To ensure the students are performing good research and would eventually be viable Assistant Professor candidates, the students need to present at various conferences to help build both the university's and the individual brand. This requires sending them to two to three conferences during their time as doctoral students/candidates. Also, the likely coauthor will often be a faculty member who travels as well to supervise the process. Additionally, office space will be needed for students at least in the form of cubicles, and these will have to be furnished. Finally, there are likely to be numerous additional costs to include marketing the program/recruiting doctoral students/advertising, secretarial staff, faculty buyouts for projects/administrative support, technology, unexpected new faculty hiring, etc. that were not clearly identified in initial cost estimates.

Given all of these costs, Georgia Southern University ended up budgeting just under \$1,000,000 a year to start a doctoral program in Logistics/Supply Chain Management. This figure was determined based on the obvious costs but had some "slack" built into it for unexpected costs. The end result was this was a very accurate figure by the time the program reached maturity and was sufficient to cover many of the unexpected or unintended costs as well. It should be noted, that Georgia Southern University was founding the initial doctoral program with one major and three possible support areas or minors. Therefore, the figure was much higher than if a College of Business

already had a doctoral program and was merely adding a new major(s). As part of the study, it was estimated to cost approximately \$250,000 more a year to add a second major to the doctoral program if it was one of the existing support areas or minors.

Institutional Friction

Just as there are specific financial costs to starting a doctoral program, the internal and external pressures exert forces on the institution that create a number of types of friction as a byproduct of the process. These frictions can be with external stakeholders and competitors as well as internal members of the university. An interesting point of the process is there are different levels and types of friction based upon the stage of development or implementation. Also, the source or proponent of the friction shifts through time as well. In general, the friction is likely to begin internally, move to external and then shift back to internal.

Some of the initial friction points will likely be due to monetary considerations. Competition for limited resources will likely create the initial friction. Peer departments may oppose a doctoral program if they believe funding is a zero sum system. In other words, there is likely to be significant opposition if there is not a new source of funding for the program. Peers will view the new doctoral program as a resource drain that will negatively impact their funding opportunities for travel, summer support, research grants, etc. Even with outside or new sources of funding, there is likely to be significant initial internal opposition creating friction within the College of Business and university.

Assuming a doctoral proposal can survive the initial, internal friction, external groups will provide the second set of friction. The most likely group to oppose the proposal and create friction is peer and/or competitor universities. Peer schools may oppose the proposal to maintain the status quo and not be seen as "falling behind" peer institutions. Also, more

prestigious or tier one schools might oppose the proposal since it may create more competition for potential students and state level funding. Both of these groups may be limited to one or two institutions from across a statewide system. However, the consequences of university Presidents competing over budget and programs can have significant and long lasting effects on a university's position within a statewide system. At a lower level, there is also likely to be difficulties and friction between different faculties. For example, two universities' faculties disagreed over whether a satellite campus should teach a curriculum that was very similar to an existing program at a nearby main competitor campus. The resulting friction caused the two universities to cancel all standing agreements within one specific discipline. Therefore, a doctoral program's curriculum or specific major may create friction. For example, one of the premier research universities in the state of Georgia was opposed to the doctoral program proposal from Georgia Southern University because that university was considering adding courses in that area at a future date. Therefore, even when there was a gap in the system, friction resulted from a doctoral program proposal.

After the proposal approval, the next set of friction points will shift back to internal pressures within the university. There are an ample number of unintended problems that create friction within the College of Business. The first area of friction is between administration and faculty members.

The administration and faculty have different views on the benefits and costs of the doctoral program. As identified by the Prospect Theory, both groups will have likely maximized their perceived benefits and failed to adequately evaluate the costs. This is exacerbated by the differing viewpoints of administration and faculty. Administration will see the doctoral program as a means to a number of outcomes. It is a tool to increase prestige and research output for the College of Business. In addition, in some

programs it will be seen as a method to increase revenues through donations, premium tuition and online delivery methods. The faculty members view the doctoral program as an opportunity to train future academics and to work with novice researchers in a one-on-one setting. Neither side will fully recognize the others challenges. For example, administrators may undervalue the time it takes to work on dissertation committees, create/grade comprehensive exams, and develop/improve doctoral curriculum. Simultaneously, faculty will not seriously consider the financial costs of the program due to reduced teaching loads, doctoral student costs, opportunity costs of capital and administrative time/effort/support. In addition, administration members are faculty members; however, they are also policy makers. Therefore, they are likely to impose their beliefs on curriculum, process and other doctoral program decisions based on their experiences and biases. While the administration members are academics, they are likely to have been out of the classroom and the farthest removed from their doctoral experiences (i.e., they earned their doctorate longer ago than most faculty.) The result is a possible friction point over who is best suited to provide input and make doctoral program decisions: the doctoral faculty or the College of Business administrators. This is an important unintended consequence due to the long lasting effects of faculty verses administration conflicts if not carefully considered and mitigated early in the process.

The next set of unintended friction points will be between various disciplines and a number of unexpected problems are likely to occur. First, the primary discipline will likely have a reduced teaching load as previously identified. In a teaching or hybrid university, this may cause differential teaching loads across the College of Business. This will raise questions of equity among disciplines. For example, at Georgia Southern University the primary discipline moved to a two-two load in recognition of the additional efforts required as part of the program. However, other disciplines had mixed

changes. Supporting or minor areas only received a one-course reduction if they were teaching in the program. Other disciplines did not have any reductions. The result was a faculty that taught between two-two and four-four loads depending on discipline and participation in the doctoral program. In addition to teaching loads, another area that causes friction is the inclusiveness of the doctoral program. While it may seem obvious, the question arises of who is the parent discipline with the doctoral degree and possibly the doctoral program. If a PhD in Marketing is started, are Sales faculty a part of the core group? If it is a degree in Supply Chain Management, then who are the parent discipline faculty? Also, how much of a say should the minor areas and other disciplines in the College have in the overall shaping of the program? Finally, if it is the first degree in a series of degrees for an entire doctoral program, there is likely to be a great deal of friction as College policies are agreed upon even if there is only one degree program. Finally, as identified previously, clashes may occur over funding between departments as part of the doctoral debate. This will become readily apparent in later years as minor areas and supporting disciplines (i.e., statistics) are required to teach large numbers of classes for few students. The cost to the departments in terms of capacity will create additional frictions between departments especially if those disciplines do not have doctoral degrees of their own.

The final area of friction may occur within the specific discipline area. There will be many differences of opinion from basic operational areas to philosophic plans for the strategic direction of the degree. Some faculty members will view the degree as an opportunity to do additional research. Others will see it as another burden from administration. Additional members may view it as taking resources from other areas in their discipline (i.e., undergraduate and MBA.) The type of doctoral candidates to be produced is an important strategic decision –

tier one researchers or faculty for teaching colleges and universities. For operational decisions, the questions of how many doctoral students to admit and which students should be accepted can cause friction, as can decisions about dismissals of students from a Ph.D. program. In all likelihood, this group will be the most homogenous in thought and have the least amount of friction. However, one should not underestimate the opportunity for challenges by not considering the possible internal department frictions.

Placement of students and perceptions about success of the program can also create tensions. If students are not placed at research schools some may consider this a failure and reduce their support for the program. Placement can also generate debates about what the placement goals should be regarding types of schools. In any case, placement of students can be a source of additional friction.

The amount of friction caused by the doctoral program at Georgia Southern University was the largest surprise in the process. There were significant amounts of displeasure from the beginning through the actual operational phases of the doctoral program. It may have been heightened by the cross-disciplinary nature of the final, approved degree by the incorporation of Supply Chain Management. Regardless, the amount, breadth and continuous frictions created by the doctoral program were clearly an unexpected consequence that decision makers should carefully consider when making the doctoral program judgment.

Pedagogical and Operational Issues

The final area of unintended consequences rests primarily in the day-to-day teaching and operations of a doctoral program. All of those little details are combined to create a number of unexpected problems. While none were insurmountable, they take time, effort and cost to mitigate any negative consequences.

In terms of teaching the doctoral classes, the first challenge is that the courses that are approved and fit the initial pedagogical model are often unable to be taught as planned. First, some faculty members will simply change the course content to coincide with their beliefs of what should be in the program or to play to their research strengths. In addition to that challenge, there will be teaching capacity constraints from various sources to cover all the doctoral specific classes. Next, the faculty that approves the doctoral program's curriculum are not necessarily going to be the ones that enact it due to attrition and personnel changes. At best, two of three key members will survive the process from concept to execution (Note: it was a seven-year process from first proposal draft to first class taught.) If one of the professors leaves with a very special skill set (i.e., simulation, SEM, etc.) that person will be very difficult to replace in a timely manner to continue the degree's requirements.

Another unexpected challenge is the simple policies that seem to get harder when enacted. Presumably all doctoral programs have some form of comprehensive exam and dissertation. However, the actual implementation of these can be very difficult due to the large number of faculty members involved in the overall process. Simple questions about format and committee composition can become long-drawn out debates that delay doctoral candidate's processes. One example question is what is the role of statistics professors on a comprehensive exam – should they have a question, do they grade the exam, are they advisors, etc. While these areas lead to friction, they are also simple operational matters that are not likely to be included in the initial consideration of the program.

Another unintended area is administrative time required by the faculty member(s) to support the doctoral program. As identified previously, there will be an increase in administrative support needed for a new doctoral program, likely a secretary and/or office manager type of position. Just getting all the catalog changes through the

system seems like a full-time job during the first year or two of a program. All the day-to-day tasks of assigning doctoral students to faculty, teaching schedules for Ph.D. students, preparation of international Ph.D. students for teaching in English, the timing of Ph.D. student class offerings, annual reviews, appeal procedures, etc. are extremely time consuming. One major task that requires a great deal of time over many years involves faculty efforts to place their students and all the networking this may require. Another specific example that was highlighted by McWilliams, et. al. is the changing legal considerations of a doctoral program (2002). There is a high likelihood that a new doctoral program will have an issue with a student at a time when all of the procedures and policies are not fully in place. This could put the university into a difficult legal position if the student is willing to bring suit. Faculty and administrators should note the possible unintended legal complications of a new doctoral program especially since the typical student is probably well into their late twenties or beyond, has significant work experience and has dealt with HRM/legal in other organizations. The administration of the program faces all of these challenges and should be properly evaluated as part of any doctoral proposal.

Finally, the unintended costs that can result from accreditation should also not be ignored. The addition of a doctoral program often moves a College of Business into a "higher" category by AACSB. Therefore, AACSB will have higher standards during five-year reviews when a doctoral program is started. It is important to note that this applies across the College of Business and not to just the discipline that begins the program. By moving into this new accreditation category at Georgia Southern issues arose with both the quality and mix of research output. That is, AACSB began to expect publications in journals that are considered of a "higher quality" and a shift in research focus with a reduction in pedagogical and an increase in basic research. As a result, at Georgia Southern fundamental changes have

been necessary in areas ranging from promotion and tenure expectations, to workload procedures, intellectual contribution guidelines, and Academically/Professionally Qualified standards (AQ/PQ). For example, a doctoral student who is still completing course work or who has not yet passed comprehensive exams is not considered to be AQ. Therefore, if he or she is assigned to teach a course, the College of Business' metric would suffer. However, if a doctoral candidate (i.e., some one that has passed comprehensive exams) teaches, he/she will be considered AQ. AACSB guidelines allow a small percentage of sections to be taught by Ph.D. students and still have them considered academically qualified. Therefore, AACSB places a constraint of when doctoral students/candidates can teach and limits their usefulness to after they have completed comprehensive exams. This reduces the overall value of a doctoral student to the College of Business. It would be difficult to overstate the time and effort needed to transform faculty expectations and workload at Georgia Southern given AACSB requirements for faculty at doctoral granting schools. These unintended costs should not be minimized in evaluating the addition of a doctoral program.

In conclusion, starting a doctoral program creates many unintended consequences. Some may be unique to a specific situation. However, most are likely universal with any new program. They vary from hidden costs to friction to operational items. However, all are likely not properly evaluated and mitigated during the doctoral planning process. The combination of these items may be somewhat overwhelming. However, the point of this article is to highlight the decision makers' challenges and better allow them opportunities to avoid potential unexpected pitfalls. None of these and other hidden consequences is by itself a reason to preclude a doctoral program. Rather, they are realistic challenges to be avoided or addressed when making an honest assessment of the potential pros and cons of starting a doctoral program.

MODEL DEVELOPMENT

Based on the theory and real-world experience of beginning a doctoral program, it is appropriate to develop two models for inclusion to help readers better evaluate the benefits and disadvantages of the process. The first model is based upon propositions developed from the theories that were presented earlier and presents the theoretical view. The second model is an applied representation of the process of developing and implementing a doctoral program.

The two relevant theories in conjunction with reasonable observations provide the foundation for a number of propositions. Prospect Theory highlights the careful weighing of benefits and costs to make a scientific decision. Refinements of the theory include the points that not all considerations are equally weighted and negative items may be undervalued. The first two basic propositions follow from this line of reasoning.

P1: Most universities view a doctoral program as a beneficial element.

P2: Given the overall benefits, most doctoral evaluations will underweight or fail to consider the possible negative consequences.

In addition to these propositions, the Neo-Institutional Theory suggests that the organizations will be more likely to maintain a status quo than change. When considered with the potential amounts and types of friction, this may be further expanded to incorporate specific positions taken by internal and external actors in the overall system.

P3: Most universities, Colleges of Business, or departments are likely to resist change.

P4: Groups and individuals opposed to the creation of any doctoral program or degree will cite the benefits of the status quo as a primary argument against change.

The four propositions help to frame the theoretical model presented in Figure 1. It represents the forces that affect the doctoral program decision. Furthermore, it represents the relationships in simplistic terms throughout the process.

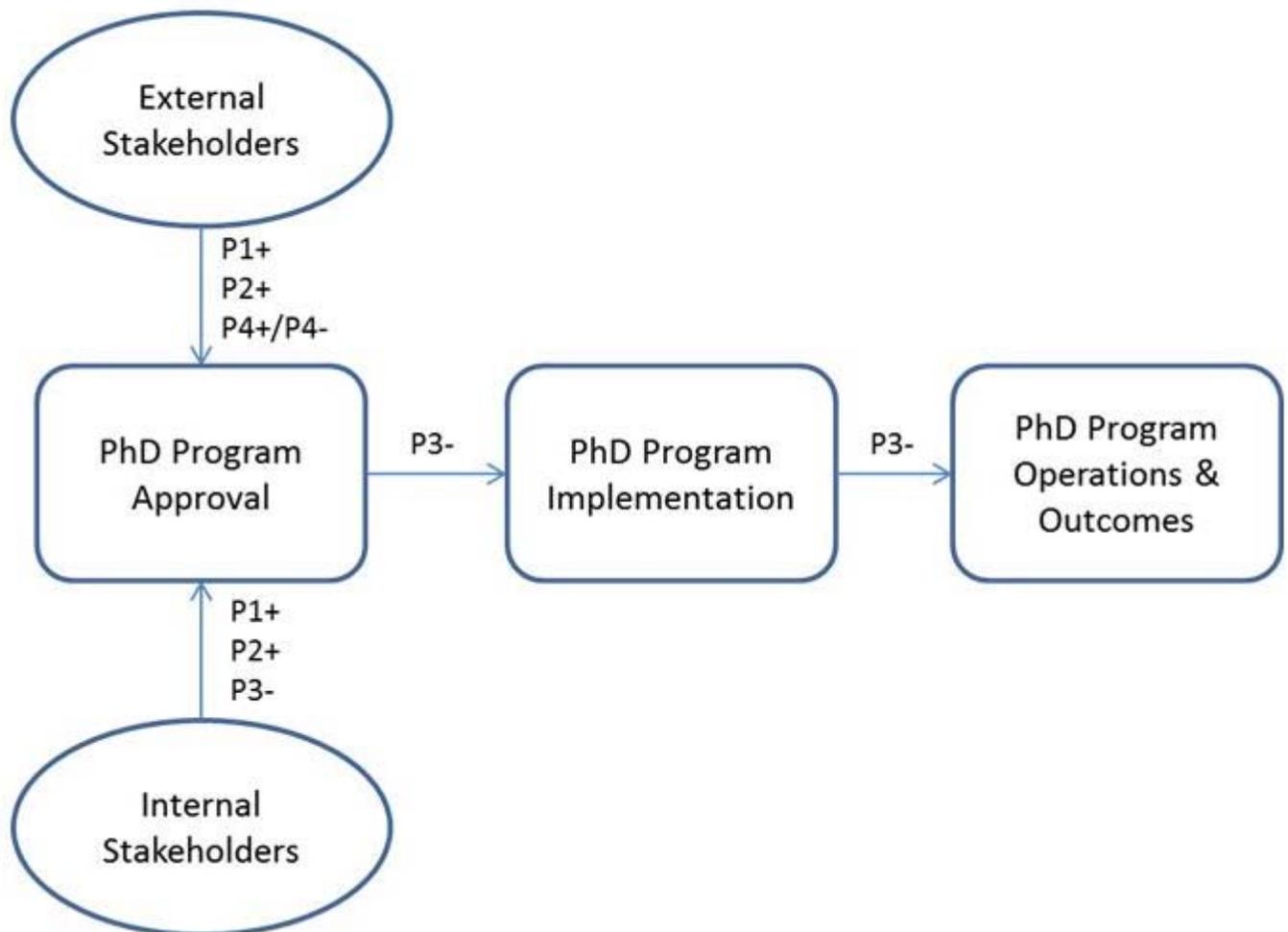
One interesting part of the model is the both positive and negative effects of Proposition 4 on the model (P4+ and P4-). Due to the various external stakeholders, specific stakeholders may have rationales to support or oppose the change. The external stakeholder may use the status quo argument to support or oppose the doctoral program based on their desired outcome. This same argument could be used with internal stakeholders. However, the internal elements that support the status quo are still represented

by Proposition 3 and the negative impact they create on the process (P3-). Furthermore, the internal friction is likely to continue throughout the process and not be limited to the approval phase as indicated by Figure 1.

The end result of the theoretical model is to highlight the various actors and the impact each may have at different stages of the process. However, Figure 2 may present a more useful model. It provides a similar examination of the process and uses the amount of friction or unintended consequences against a timeline to better inform decision makers.

By plotting a time verse friction/unexpected outcomes, the model uses a graphical interface to highlight the changing roles and “costs” to starting a doctoral program. While the specific

FIGURE 1
THEORETICAL MODEL OF DOCTORAL PROGRAM IMPLEMENTATION



values of friction or unintended consequences are subjective, the overall results are a fair representation of at least one doctoral start-up. The specific amounts may change with another doctoral program creation, but there is some basic generalizability from Figure 2. It does clearly identify where decision makers are likely to have challenges throughout the doctoral program creation process.

CONCLUSIONS, LIMITATIONS, AND FUTURE OPPORTUNITIES

Probably the greatest weakness of the article is the lack of a large number of examples to complete a statistically significant study. However, the limited number of new doctoral programs creates an obstacle to gathering data. This does present a future opportunity for research. If enough interest is created, a follow-on qualitative study of new programs could be conducted. However, this article does capture key finding that should be useful.

The primary purpose of this article was not to conduct an academic study. Rather, the purpose was to inform all academics of the challenges of creating a doctoral program. There are a number of serious challenges to starting any type of program. However, the doctoral program includes a number of obvious and hidden ordeals. Decision makers need a clear understanding of all the costs and efforts needed to begin a successful program.

While the majority of the article focuses on the negative, there are some very large benefits from launching a doctoral program. The authors have very much enjoyed being part of this type of process and would strongly encourage other institutions to consider a doctoral program. The key point is that the administrators and faculty members have a better understanding of the process, benefits and true costs to execute a more successful start-up.

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FIGURE 2
PRACTICAL VIEW OF UNINTENDED CONSEQUENCES OF DOCTORAL PROGRAM

