

The successful graduate student: a review of the factors for success

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ABSTRACT

This study was based on a survey of graduate students in the Educational Leadership & Counseling Department at Texas A&M University-Kingsville. The study first determined to poll only those students who had completed at least nine semester hours of graduate work and who had maintained a 3.25 grade point average or higher. Ultimately, the study sought to identify the factors that play an important role in the overall success of the graduate students. The survey focused on the students of two professors totaling 108 (N=108) with the number responding (N_r) totaling 70. The survey was divided into two parts: participant profile and personal factors. Using the data obtained, the factors were scored by percentage of responses and categorized into primary (>90%), secondary (>80-89%), and tertiary factors (<79%). The implications of this study can be useful in determining the quality of the graduate program, strategies which can be developed to create and maintain a community of connectedness for students, the role of professors in the overall success of their students, and initiatives to halt attrition and sustain graduate student success.

Keywords: graduate student, success, attrition, faculty, advising, connectedness

INTRODUCTION

The continuing study and research into graduate retention and drop-out rate is of supreme importance to higher education institutions, students, and employers. Cooke, Sims, & Peyrefitte (1995) stated “although much is known about undergraduate student attrition in the United States, very little is known about graduate student attrition” (p. 677). So why are the attrition (drop-out) rates so high? Earl-Novell (2006) found a conglomeration of research indicating a plethora of varying factors leading to graduate student attrition. In order to provide further insight into this issue, the authors determined to study a concentrated number of student responses to a survey designed to identify success factors among graduate students in the College of Education’s Educational Leadership and Counseling department at Texas A&M University-Kingsville.

While this study sought to review the factors for graduate student success, the task of accurately and succinctly defining success and failure factors remains daunting. Gross, Lopez, & Hughes (2008) reported “retention and graduation rates in graduate school are inherently much harder to study” (p. 112). And studying these factors is as difficult today as it was forty years ago. Wright (1964) suggested “little is known about the kinds of students who fail to earn the graduate degree to which they have aspired and toward which they have spent at least a semester of time and energy” (p. 73). Some of the difficulty may lie in the contemporary uniqueness of factors over the past four decades. Online and hybrid courses enabled by the use of the internet were non-existent in that era. In essence, while the technology and society has changed, people have not. The diversity of students, varying levels of technological aptitude, and administrative review of student success/failure rates are critical issues which change on a frequent basis. The human factor is the one constant that has not changed.

Important Implications of the Study

This study seeks to understand some of the factors for success which may lead to innovative ways the university can provide for a more successful atmosphere in terms of graduate success. Understanding, defining, and identifying factors for success (or failure, for that matter) become vital to both the institute and to the individual student. What are some important contributions this study could provide in review of graduate student success?

First, it may provide a basis on which to measure the relevancy of the graduate program itself. If a graduate program fails to provide a contemporary context for equipping students in an ever changing world, it stands to reason students will not be committed long term. Programmatic accreditation ensures the courses will be taught to the highest academic and professional standards. This promotes an atmosphere of academic relevancy.

Second, identifying success factors will give students an awareness of essential elements for successful completion of their graduate studies. Implied in this understanding will be an opportunity for each student to enhance and hone their personal and professional skills to optimize their ratio for success.

Third, identifying success factors is crucial for professors who want to engage and encourage their students at the highest level. As will be shown by this study and a review of similar studies, the impact of the professor’s influence on the graduate student’s success is monumental.

Review of the literature

Overall, review of the material has found attrition rates at the graduate level are high. Bowen and Rudenstine (1992) approximated graduate attrition rates in some universities ranging from 30-70 percent. Lovitts & Nelson (2000) reported “forty years of studies suggest the long-term attrition rate nationwide is about 50 percent” (p. 1). A National Science Foundation study (1998) found “selected data presented at the workshop showed large differences in completion rates among the institutions, even within one field. In sociology, for example, it varied from a low of 38 percent to a high of 52 percent.” Attrition is also a major consideration for institutions worldwide. Cao & Gabb (2006) postulated: “Australian universities are paying increased attention to reducing student attrition, both because it results in considerable costs to the student (e.g. fees, opportunity costs, emotional costs) and to the institution (e.g. loss of fees, recruitment costs, tuition costs)” (p. 1).

The study of attrition factors and rates among graduate students is critical for all institutions. Ferrer de Valero (2001) made the following summary concerning the importance of understanding attrition at the graduate level:

Given the high costs associated with graduate education, the current national climate of diminishing resources for higher education and an increased competition for these resources between undergraduate and graduate programs, understanding and examining the factors that affect students' ability to complete their degree requirements in a timely manner and considering the implications of these factors becomes crucial. (p. 341)

Not only does attrition directly affect the institution, but studies indicate those students who drop out pay emotional and personal tolls (Lovitts & Nelson, 2000). This seems to suggest the likelihood of a graduate student returning to finish his or her degree is significantly diminished if that student drops out before graduating. Motivation then becomes a key factor for success. McCollum and Kajs (2007) asserted “without motivation, very little learning or performance occurs” (p. 45). Motivation may need to be seen as both a pre-existing trait and as one that is fostered in the atmosphere of a nurturing academic environment. In essence, can a student be effectively motivated if the academic environment is lacking? According to Bair (1999), persistence linked with motivation and attrition are connected to, “(a) department culture, (b) student –faculty relationships, (c) financial support, (d) student involvement and (e) program satisfaction” (as quoted in Hoskins and Goldberg, p. 176). Motivated individuals have an innate sense for success. In other words, “successful people work to achieve personal goals; they are not motivated to achieve social indicators of success. Success, for them, is a feeling they enjoy when they reach their self-chosen goals...” Feelings of personal success come from goals the individual sets for him/herself and not the goals imposed by others (Siebert, 2005, p. 120).

Sampling of studies

Lovitts and Nelson (2000) reviewed a number of factors impacting graduate student success by focusing particularly on why students did not persist in the graduate program. These factors were generally categorized into the following: climate and fit, types of financial support, bad programs, and faculty roles. As to climate and fit, the authors found problems start with the

application process. Their findings indicate an academic ignorance on the part of the students as to the quality, goals, nature, strengths, and reputation of the graduate program itself. Financial support was found to be important for graduate students, but the caveat is that financial support does not guarantee graduate school completion.

The significance of this environment apparently extends across racial and ethnic lines. Even among minorities, Lovitts & Nelson (2000) found many seem to have a higher attrition rate and “giving minority students full fellowships is no guarantee that they will complete Ph.D.’s and substantially increase minority representation on the faculty” (p. 3). In essence, it takes more than financial support to promote graduate student success.

Earl-Novell (2006) conducted a study at the Center for Studies in Higher Education at the University of California, Berkeley. The author studied program structure features, integration mechanisms as they relate to type of financial support, teaching opportunities, and advisor-advisee relationships with doctoral students in Mathematics. The findings favored student-advisor relationships as the primary reason for doctoral persistence.

Braunstein (2002) found GPA’s and work experience as having “positive correlations with academic success in the MBA program” (p. 472). These findings suggest students who have significant work experience are more likely to make a contribution to the academic environment and overall achievement.

METHODOLOGY

This study was based on a survey of graduate students in the Educational Leadership & Counseling Department at Texas A&M University-Kingsville. The study first determined to poll only those students who had completed at least nine semester hours of graduate work and who had maintained a 3.25 grade point average or higher. Ultimately, the study sought to identify the factors that play an important role in the overall success of the graduate students. The survey focused on the students of two professors totaling 108 (N=108) with the number responding (N_r) totaling 70. The survey was divided into three parts: participant profile (six questions), personal factors (ten questions), and university-related factors (thirteen questions). A five-point Likert scale was used to address the issue of agreement. Using the data obtained, the factors were then scored by percentage of responses and categorized into primary (>90%), secondary (>80-89%), and tertiary factors (<79%).

RESULTS

Of the 108 graduate students surveyed, 70 graduate students returned valid surveys and were included in the study. Demographics of respondents were as follows: 52% were Hispanic, 34.7% were Caucasian, 1.3% were African American and 4% claimed a mixed ethnicity. 57.3% were females and 36% were males. 65.3% were married and only 28% were single. Of these, 62.9% had children living at home and 92.9% were employed. The mean age of responding students was 35.87, with the youngest student being 24 and the oldest 55 years of age.

Dominant recurring themes emerged in the study results. The themes were broken down further by percentages in categories of what respondents believed were most important to their academic success (90% and above), somewhat important to their academic success (79% to 89%) and least important to their academic success (<79%).

Breaking down the emerging themes into the categories found each area to be closely related in the first two categories (Most Important and Somewhat Important). Themes found within the Most Important category consisted of increased self-esteem due to success in graduate studies, professors interested in student's academic success and affordable tuition all coming in at 91.4%. A knowledgeable advisor followed at 91.1%. Lastly, the theme of family support at 90% rounded out the important category. Found within the Somewhat Important category, the themes that emerged were personal motivation, job security and being present physically and emotionally for family at 88.6%. Having access to an online library rated at 87.1%. Online/hybrid classes came in behind online library at 84.3%. Lastly, spirituality ranked at 81.5%.

Factors that were of Less Importance to academic success of the respondents were: financially providing for family and open acknowledgement of academic success from spouse/significant other both rated at 77.2%. Having a variety of classes available to the student ranked at a level of 75.7%. Whereas, having a family member and an individual at the university serving as a mentor rated at 72.9% and 55.7% respectively. Financial aid was ranked as less important at 70%. Having access to a bookstore with inexpensive books for purchase or rental came in at 64.5%. Fifty-eight percent stated that it was difficult to study due to employment outside of the home. The presence of individuals from their own culture present at the university rated 38.5%. Lastly, belonging to an academic honor society ranked the lowest at 31.4%.

A Chi-Square analysis was also utilized to test for statistical significance with a p value of $<.05$ within the themes found in the study. Gender and children at home were the independent variables measured against the themes. A statistically significant difference was found in that the males were significantly more concerned about future job security than female students, $p=.037$. Male students felt that professor interaction was more important than female students $p=.021$. Other findings that were statistically significant were students with children at home were more motivated, $p=.046$, needed online classes and class variety $p=.038$ and were more concerned about finances, $p=.041$.

DISCUSSION

The Vital Role of Faculty

So what do the various studies and research tell us? For one thing, student/faculty interaction and connection is essential. Participants in the study acknowledged the importance of the student/faculty relationship at 91.4%. Additionally, participants deemed it very important to have access to a knowledgeable advisor at 91.1%. Nathan (2005) suggests student success to be in the manner in which the professor and the student communicate (p. 117). In other words, Nathan advocates that the relationship between the two can be symbiotic in nature: creating a personal relationship that puts a human perspective on the face of the interaction between professor and student in order to promote success for the student. Bain (2004) believes student success comes also from the professors communicating to the students that they care about that student, as they have an investment in them not only as students, but also as human beings. This investment demonstrates to the student that professors want the student to succeed and will do everything possible to help in that success, but the student also has to decide if they want to succeed, as it is a two sided equation of achievement (p. 139).

This concept leads into yet another similar route to success for the student; the professor assists in the facilitation of students believing in their own success. According to Johnson (2005), what professors bring to the classroom is just as essential as what the students bring into the classroom. "When we believe that students can succeed, they succeed. Your belief alone isn't enough; you must help your students believe that success is possible. When students believe they can succeed, they try and they learn" (Johnson, 2005, p. 138).

Financial Aid

The findings indicate many students need more financial aid options along with affordable tuition rates. Participants in the study deemed affordable tuition to be important for their academic success, as this category came in at 91.4%. But these factors are more clearly defined by demographics, the profiled needs of the students, and the immediate need for remediation of the problems from the institution's perspective. Hence, it is essential for each institution to make its own unique observations and review of the factors that will increase graduate student persistency and success.

A Community of Connectedness

Yet, the most powerful suggestion of past research and this current study has to do with the graduate student's feeling of connectedness. This connectedness includes peers, faculty, department environment, and the graduate program itself. Thus, the concept of a community of connectedness needs to be addressed as being an overall goal for institution and student. Students want to feel connected because of the inherent loneliness that seems to be part of the graduate school experience. Hoskins & Goldberg (2005) focused on the students' need to be connected. Their findings suggested that connection was "the establishment of a relationship or the failure to do so, with faculty or fellow students and a judgment of the quality of that relationship" (p. 183). Beqiri, Chase, & Bishka (2010) reported that online graduate student attrition can be affected by a feeling of isolation or abandonment which equates to disconnection. Kraska (2008) affirmed the efficacy of learning communities in reducing drop-out rates among graduate students.

Factors will likely vary in degrees of importance and priority from institution to institution and department to department. It behooves the administration of any particular institution, college, or department to know who their graduate students are. The graduate students themselves are likely to appreciate it. In this current study, there was much positive feedback from the students in the department of Educational Leadership and Counseling who participated in the study. Their comments were indicative of their belief that the department and faculty were interested in connecting. The following are excerpts from those responses.

"I am so glad that I took the time to answer the survey questions. Those questions further reinforced my purpose for obtaining my master's degree. I hadn't been asked to think about how my family has influenced my decision to go back to school. Yes, they are constantly in the forefront of any decisions I make, but as I answered those questions, I was forced to evaluate what I am doing. Am I doing what's best for me and my family? How will obtaining a graduate level degree help me? The survey questions made me think about my values, my children and husband and parents, and what obtaining this degree will mean for my future and theirs as well. I

also reflected on how important it has been for me to be taking these graduate classes with three of my colleagues. If it wasn't for them, I don't think I would be as focused or motivated to finish. They, along with my family, have become my driving force to accomplish this goal that I've had since I was 19 years old" (female graduate student).

"I feel very honored to get to voice my opinion on matters concerning grad school. I have had a very rewarding experience at TAMUK. I am a full time teacher and football coach and spend a lot of time on the job. TAMUK does their program in a way that my job and post graduate work can both win. I have never felt the courses I have taken have been a burden at all. Yes, they have taken some considerable time but it has always felt rewarding to do so. I have recommended this program to many others because of the great job your staff does" (male graduate student).

"As I am sure you already know, I believe the crucial factor in my success has been instructors that care, understand, and are involved with my education" (female graduate student).

"I just completed the survey. The content of the survey was important and made me feel like my opinions do matter to the university" (female graduate student).

"Throughout my graduate courses in which I have received a Master's in Early Childhood, completed all course work for a Master's in Administration (I just did not take the research classes) I have never sat down with an Advisor to take a look at a degree plan. Do not get me wrong I did have a degree plan signed and given to me although I just pretty much did it on my own. With the Counseling and Guidance I have felt a bit more supportive with my plan, and I can see that it is getting better" (female graduate student).

"After reading the consent to take the survey I was very pleased with the privacy and the reason behind the survey. As a graduate student it's good to see professors trying to better things for the future students" (female graduate student).

"While completing the survey I realized how much of an accomplishment it was for me to complete graduate school. At first it was something I wanted to do because it was the "next step." I then realized that I wanted to do it for my family. I was the first in my family to complete college and so far have been the only one. I want to set higher standards for my children that way they can be successful as well. Most of the questions on the survey I had to strongly agree to. Family, religion, financial aid, professors, online/hybrid courses are just a few that really made graduating graduate school an attainable goal for me" (female graduate student).

One of the limitations of this study had to do with the small number of participants and the fact that only one department within the college of Education was surveyed. However, it was encouraging to find the results were similar to larger and more inclusive studies. This study concluded that whether one is reviewing a traditional non-minority institution or a traditional minority serving institution, the correlative factors are similar. Ethnic, culture and gender factors remain constant throughout the study of successful graduate students. Depending upon the institution, some factors will be more prevalent than others, but they are still on the chart as to importance and relevancy. As to the quality of the graduate program itself, much of the data

from other studies and the indications of this study revealed the problem is not so much with the student as it is the program of study itself in that it may disallow a community of connectedness.

The implications of this study can be useful in determining the quality of the graduate program, strategies which can be developed to create and maintain a community of connectedness for students, the role of professors in the overall success of their students, and initiatives to halt attrition and sustain graduate student success. The findings indicate student attrition can best be addressed by augmenting programmatical relevance and faculty mentoring, advising, encouraging, coaching, and modeling. Hence, the factors which can and do affect graduate student success have their genesis within the institution and faculty.

References

- Bain, K., (2004). *What the best college teachers do*. Cambridge, MA: Harvard University Press.
- Beqiri, M., Chase, N. & Bishka, A. (2010). Online course delivery: An empirical investigation of factors affecting student satisfaction. *Journal of Education for Business*. 85, 95-100.
- Bowen, W.G., & Rudenstine, N.L. (1992). *In pursuit of the Ph.D.* Princeton, NJ: Princeton University Press.
- Braunstein, A. (2002). Factors determining success in a graduate business program. *College Student Journal*, 36, 471-484. Retrieved March 23, 2010 from EBSCO Host Mobile.
- Cao, Z. & Gabb, R. 2007. Student attrition at a new generation university. *Australian Association for Research in Education*. Conference, 2006, Adelaide.
- Cooke, D., Sims, J., & Peyrefitte, J. (1995). *Journal of Psychology*. Vol. 129, 677-688.
- Earl-Novell, S. (2006). Determining the extent to which program structure features and integration mechanisms facilitate or impede doctoral student persistence in mathematics. *International Journal of Doctoral Studies*, 1, 45-57.
- Ferrer de Valero, Y. (May-June, 2001). Departmental factors affecting time-to-degree and completion rates of doctoral students at one land-grant research institution. *The Journal of Higher Education*. Vol. 72, No. 3, 341-367.
- Gross, N.A., Lopez, R., & Hughes, W.J. (2008). Theory into practice: Applying lessons learned from retention studies to build a diverse graduate community. In AIP Conference proceedings at the National Society of Black Physicists. Retrieved March 20, 2010 from AIP Conference Proceedings.
- Hoskins, C. M., & Goldberg, A. D. (2005). Doctoral student persistence in counselor education programs: Student-program match. *Counselor Education & Supervision*, 44, 175 - 188.
- Johnson, L (2005). *Teaching outside the box: How to grab your students' attention by their brains*. San Francisco: Jossey-Bass.
- Kraska, M. (Fall 2008). *Retention of graduate students through learning communities*. Retrieved March 23, 2010, from <http://scholar.lib.vt.edu/ejournals/JITE/v452/kraska.html>.
- Lovitts, B. & Nelson, C. (2000). The hidden crisis in graduate education: Attrition from Ph.D. programs [Electronic version]. *Academe Online*. Retrieved May 10, 2010, from http://www.aaup.org/AAUP/CMS_Templates/Academe_Templates/AcademieArticle.aspx
- McCollum, D. & Kajs, L. (2007). Applying goal orientation theory in an exploration of student motivations in the domain of educational leadership [Electronic version]. *Educational Research Quarterly*, 31, 45 -59.
- Nathan, R. (2005). *My freshman year: What a professor learned by becoming a student*. London, England: Penguin Books.

Seibert, A. (2005). *The resiliency advantage: Master change, thrive under pressure, and bounce back from setbacks*. Berkley, CA: Berrett-Koehler.

Summary of Workshop on Graduate Student Attrition (1998). National Science Foundation, Division of Science Resources Studies, NSF 99-314, Arlington, VA.

Wright, C. (1964). Success of failure in earning graduate degrees. Retrieved May 10, 2010, from <http://www.jstor.org/stable/2111819>.

