Johnson & Wales University
ScholarsArchive@JWU

Higher Education | Center for Research and Evaluation

10-1-2010

Perceptions of Doctoral Students Regarding Factors Contributing to Student Success

Felice D. Billups
Johnson & Wales University - Providence, fbillups@jwu.edu

Stacey L. Kite
Johnson & Wales University - Providence, skite@jwu.edu

Follow this and additional works at: http://scholarsarchive.jwu.edu/highered

Part of the Higher Education Administration Commons, and the Higher Education and Teaching Commons

Repository Citation
Billups, Felice D. and Kite, Stacey L., "Perceptions of Doctoral Students Regarding Factors Contributing to Student Success" (2010). *Higher Education*. Paper 9.
http://scholarsarchive.jwu.edu/highered/9

This Conference Proceeding is brought to you for free and open access by the Center for Research and Evaluation at ScholarsArchive@JWU. It has been accepted for inclusion in Higher Education by an authorized administrator of ScholarsArchive@JWU. For more information, please contact egearing@jwu.edu.

Perceptions of Doctoral Students Regarding Factors Contributing to Student Success

Felice D. Billups
Educational Leadership Doctoral Program
Alan Shawn Feinstein Graduate School
Center for Research & Evaluation
Johnson & Wales University

Stacey L. Kite
Educational Leadership Doctoral Program
Alan Shawn Feinstein Graduate School
Center for Research & Evaluation
Johnson & Wales University

Paper presented at the 41st annual meeting of the Northeastern Educational Research Association, October 20-22, 2010, Rocky Hill, CT.

Purpose of the Study

Doctoral students comprise a unique population with special needs and concerns, both academically and personally. However, minimal research has been conducted regarding the programs and services that appropriately meet their needs, ensuring their academic success. The purpose of this study is to describe doctoral student satisfaction with Ed.D. program support services, offered at a small university in southern New England. Qualitative data from the first phase of this study identified factors that impede or assist in the completion of the degree program. These findings were used to develop a quantitative instrument to determine the satisfaction and magnitude of importance from students currently enrolled in their courses, in the dissertation phase, and alumni. This third, and final phase, consists of qualitative depth personal interviews with and reflection journals of participants to clarify the findings from Phases one and two, and to develop a rich, descriptive, holistic picture of doctoral student perspectives regarding success.

Background of the Study

Considerable research has been conducted regarding graduate and professional students, focusing largely on the reasons for attrition and departure (Ladik, 2005; Lovitts, 2001; Tinto, 1987; Tinto, 2004), reasons to pursue a doctoral degree (Antony, 2002; Golde, 1998), and the ways in which graduate students assimilate into the university, i.e. student experiences in and out of the classroom (Forney & Davis, 2002; Tinto, 2004; Weidman, Twale, & Stein, 2001). Fewer studies, however, have been conducted to assess support services

offered to graduate and professional students designed to enhance their educational experience and assist with their work-life balance. While these support services may seem incidental to the graduate student experience, a thoughtful and intentional program may affect student satisfaction, persistence, and a greater sense of connectedness with the institution (Elliott, 2003; Poock, 2004). Additionally, graduate students (and especially doctoral students) exhibit significantly different characteristics and needs compared with their undergraduate counterparts, yet much of the research fails to distinguish their unique profile (Ladki, 2005; Polson, 2003).

Graduate student attrition and persistence: Graduate students, and doctoral students in particular, tend to withdraw at three distinct enrollment points; 1) within the first month, 2) at the end of the first year, and 3) after the completion of course work, prior to beginning the dissertation phase (Bowen & Rudenstein, 1992). While some institutions attempt to mitigate this trend by enrolling students with a better “fit” (Lovitts, 2001), other institutions attribute poor programming or mediocre classroom experiences as the impetus for student departures (Lovitts & Nelson, 2000). Tinto (1987) suggests, however, that a lack of integration into the organizational culture and the co-curricular opportunities is the underlying reason for student dissatisfaction and isolation.

Reasons for pursuing a doctoral degree: Golde (1998) investigated doctoral student motivations for pursuing terminal degrees. The study found that many doctoral students held unrealistic expectations about the scope, purpose, and time demands of their degree program. These frustrations were compounded by

the lack of personal and academic support services that might have offset student withdrawals. While this particular study did not delve into the possible benefits of a stronger support structure, other researchers highlight the importance of graduate student programming to strengthen persistence towards degree completion (Brandes, 2006; Lehker & Furlong, 2006; Polson, 2003; Poock, 2004).

Graduate student communities: Brandes (2006) suggests that graduate students strongly seek community, but find it superficial or elusive. Caple (1995) and Lovitts (2001) support this sentiment by emphasizing the graduate students' need for community due to the isolation of their educational experience, i.e. their specialization within an academic discipline and the increasing solitude of the conducting and completing their research. Due to the limited opportunities for doctoral students to gather and interact, compounded by the lack of dedicated programming and facilities, doctoral students typically find themselves on the "fringes" of the campus community. This isolation lessens their affiliation and connection with the institution, overall, and with each other, in particular (Golde & Dore, 2001). The resulting effect of this lack of integration is a lack of cohesion as a group and a fragmented sense of belonging (Brandes, 2006). This isolation is further aggravated by the doctoral student's narrow focus in a specialized discipline, in those instances where their course work and research may take up to ten years to complete (Golde & Dore, 2001).

Socialization to academic norms: The primary purpose of doctoral education extends beyond the discipline-based specialization; the goal is to prepare the

student for the scholar role (Weidman & Stein, 2003). This socialization to academic norms of research and scholarship affects doctoral students' perceptions of fellow students, ultimately affecting their relationships and integration with the community, as a whole (2003). Using Weidman's framework for undergraduate socialization (1989), doctoral students have been found to need the same academic-peer culture assimilation. The framework identifies three distinct socialization constructs: 1) interaction with others, 2) integration into the expectations of faculty and peers, and 3) learning the necessary knowledge and skills for professional scholarship (Weidman, 1989). The research finds that doctoral students become socialized differently than other graduate students or undergraduate students and seek different levels of engagement with faculty, peers, and their institutions. The most important elements of socialization for doctoral students include 1) student scholarly engagement, 2) departmental/program affiliation, and 3) student-faculty interactions (Weidman & Stein, 2003). These findings, and the application of the socialization framework, resonate with Tinto's (1987) integration framework that confirms these elements as essential to a student's sense of connection, belonging, and ultimate success.

Assimilation into the university culture: Several researchers offer perspectives on how doctoral and professional students assimilate to a new campus culture, which is especially challenging if they are enrolled as part-time students (Brandes, 2006; Golde, 1998; Lawson & Fuehrer, 2001). Students must navigate the university bureaucracy, the processes for registration and financial arrangements, the departmental norms, program requirements, and scheduling

logistics. Adults who have returned to graduate school after a hiatus find this scenario particularly daunting and crave a corresponding support structure (Polson, 2003).

Some researchers have found that customized graduate support programs may reduce first-year stress and isolation (Antony, 2002; Lawson & Fuehrer, 2001). Examples of these support programs typically include orientation programs, peer-to-peer counseling, specialized academic advising, financial assistance, student support groups, and increased faculty-student interaction, (both formal and informal). Streeter (1985) was one of the first researchers to explore the relationship between first-year graduate student anxiety levels and the extent of faculty-student interactions. The importance of the faculty-student interaction is highlighted by other researchers, as well (Kim, Rhoades, & Woodard, 2003).

Graduate student profile: Today's graduate student population comprises adult students who are often enrolled on a part-time basis, and who struggle to maintain a work-life balance with their careers, their civic and community obligations, and most importantly, their families. Many of these students have returned to education after a period of years; they are focused on pursuing advancement in their current career or in changing professions altogether (Zigmond, 1998). Additionally, their personal time and their finances are strained as a result of seeking a degree while preparing for new professional roles. These students demand a different mix of student services, requiring the collaboration and creativity of graduate school faculty and administrators. More

extensive research is needed to better understand the needs and interests of graduate and professional students in order to ensure their satisfaction and academic success.

Conceptual Framework

Tinto's (1987) academic integration theory forms the basis for this study, emphasizing the relationship between student satisfaction and institutional commitment. Tinto measured student satisfaction across six transformative dimensions, from growth and development to self-actualization. The dimensions include: 1) educational experience, 2) development of skills and knowledge, 3) faculty contact, 4) personal and social growth, 5) sense of community, and 6) overall commitment to and satisfaction with the college. Additionally, Elliott's (2003) emphasis on "student-centeredness" supplements Tinto's research, further emphasizing the relationship between student satisfaction and the extent to which an institution supports students during their educational tenure. The dimensions include:

Educational experience: The extent to which student expectations are met relative to course content, rigor, quality, and challenge;

Development of skills & knowledge: The extent to which students are able to learn, to think critically, develop problem-solving skills, synthesize material, and analyze information;

Faculty contact: The extent to which students are satisfied with academic advising, accessibility of faculty, and the extent of the interaction with faculty acting as advisors/mentors;

Personal and social growth: The extent to which personal and/or social growth is experienced and developed by the student (personal growth defined as private, individually-directed development, while social growth is defined as involvement in planned group activities and interactions, usually sponsored by the institution);

Sense of community: The extent to which students feel a sense of belonging and being welcomed by the institution, both broadly and within their individual departments; in addition to personal relationships, students may form a relationship with the institution's organizational identity and culture (Bhattacharya, Rao, & Glynn, 1995);

Overall commitment to and satisfaction with college: The extent to which students feel they have selected the right institution for their aspirations, the sense that they would select the same institution again, and the confirmation that they would recommend the institution to a classmate or friend.

Methodology

Design

This third phase of a mixed methods descriptive study follows: 1) a qualitative phase in which students were queried, through *N=4* focus groups and *N=8* personal interviews, on the factors that impede or support their success in a doctoral program, and 2) a quantitative phase in which students were asked to complete a self- administered survey questionnaire to measure their satisfaction and magnitude of importance regarding those same factors.

The study's third phase further explores and probes student perceptions about their experience through *N=9* individual depth interviews and *N=9* journal reflections with current students in all phases of course work and dissertation, and alumni. This final phase was intended to develop a detailed and richly descriptive holistic picture of their doctoral experience by building on prior themes, essence meanings, and stories.

Participants

Participants for this study consisted of students and alumni from a small Ed.D. doctoral program located in Southern New England. The program comprises a cohort structure where all students travel through two years of coursework and then complete the dissertation (within four years, six years total). Phase Three included purposefully selected students who were currently enrolled in coursework (years one and two) (*N=3),* students in the dissertation phase (*N=3),* and alumni (*N=3*) . These participants were purposefully chosen for their 'information-rich' capacities to provide detailed responses and thick description (Lincoln & Guba, 1985).

Instrumentation

This phase of the study employed semi-structured interviews and participant journal reflections to suuplement and augment findings from prior phases. Current students and alumni were queried regarding the details of their perceptions and experiences about doctoral program support services as previously examined in Phases One and Two . Probes were integrated into the conversations to extract more detailed information about student comments. In-

depth interviewing is useful in developing first-hand descriptions of the “lived” experience (Gubrium & Holstein, 2001).

Following each interview, peer debriefing was employed to check the accuracy and consistency of the findings (Lincoln & Guba, 1985). Furthermore, the initial findings were sent to the participants for member checking in order to correct errors, assess the intention of participant words, and add meaning to the findings that may have been stimulated from reading the transcripts (Lincoln & Guba).

Participant journal reflections were also employed to further secure participant feelings and observations about their experiences, capitalizing on their own words and phrases to describe their personal stories. Journaling is used to solicit participant expressive verbalization of specific questions that follow depth interviews or focus groups. This method is intended to refine and extend the self-identified nuances and discourse inherent in face-to-face interviewing (Lincoln & Guba, 1985).

Data Analysis

Interview and journal data was transcribed following each interview session and coded using a constant comparative method of data analysis. Interview transcriptions were treated holistically at the completion of the interview sessions. Coding of the data employed 1) descriptive coding, 2) interpretative coding, and 3) pattern coding in order to ascertain the meaning and interpretations of the participants’ experiences. Coded data was subsequently transformed into themes and categories in order to present the findings, and used participants’ words and expressions to illustrate their meaning essence.

Findings

The theoretical framework for this study was rooted in Tinto's (1987) integration theory. These findings are reported according to the six transformative dimensions of growth and development, and give voice to participants' unique perspectives.

Dimension #1:
The Educational Experience: "Surprisingly challenges and new levels of inquiry…"

When reflecting on the courses in the program, participants want a curriculum relevant to their professional experiences and positions, and to link with recent developments in their fields. Participants also seek more peer to peer learning, more content in law, risk management, and facilities management, and guest speakers who could speak to current events and issues. The program is practitioner-focused and students want to share their experiences more significantly in their classes.

Participants further express appreciation for the range and extent of intellectual challenges inherent in the doctoral curriculum. Many expect the doctoral program to be a faster paced version of their masters' degree programs; in fact, they found that the course work caused them to struggle with many assignments and ways of seeing issues that were unexpected. As one interviewee stated, "The program forced me to look at my profession from a different perspective because the course work challenged me to think about

theory and issues in a new way…it was an entirely different type of graduate education for me". Participants also found that while some courses needed updating, most courses supported their work in their respective fields in substantive ways. One graduate said that "…every part of the curriculum has been relevant to my career and I have used many elements in my job ..". Another graduate emphasized that "the courses I initially thought would be irrelevant have proved to be just the opposite and most courses provided the latitude to take key topics and weave them into something useful in my every day professional practice".

Participants demanded increased peer-to-peer learning in and out of the classroom, a theme that was first introduced in Phase One focus groups. As one current student expressed, "…the class discussions with my peers have made this experience so much better, and I often seek out my classmates after class to continue our conversations…". One alumna concurred and noted "… I would have enjoyed considerably more peer-to-peer learning – the debate and the challenge of struggling with current issues as fellow practitioners is a valuable asset in this program.".

Overall, comments from individual interviews and journaling indicate that the educational challenges of the doctoral program exceed participant expectations, even as they offered suggestions for future improvements. As a third-year student emphasized, "I find myself constantly driving myself into new areas of inquiry…. !",, while a graduate offered a more nostalgic perspective: "I

crave the intellectual experience of the doctoral program and miss it, even today, eight years after graduating…".

Dimension #2:
Development of skills and knowledge: "APA, ANOVAs, and angst…!"

Participants identified the development of research skills and the need to expand research assistance as essential to their success. They also requested year-long courses in research, summer clinics, and a research 'help' center. After reviewing findings from Phases One and Two, it appears that while many students and alumni feel that there is not enough emphasis on developing practical skills to conduct their research, Phase Three qualitative findings indicate that students feel the existing assistance is very helpful but just not offered frequently enough. They want more individual, focused help in these areas, and suggest other areas to include (i.e. conference presentation tips and publishing guidelines).

When asked about scaffolding of the dissertation process, many stated that this process is very helpful; however, it was suggested that while dissertation development should be incorporated into all courses, it was revealed that not all courses cover the dissertation process. Dissertation development could take the form of topic discussion, literature review, and problem statement skills during class sessions. Students expressed concern that during those terms when there was no focus on the dissertation, they felt that they lost valuable time working towards completion of their research. As one student noted, "More direction early on in the program would have made it possible for me to focus on the research strategies and techniques that I would need later on…", while another

student stressed that the dissertation is "…the brass ring and it should be the foundation for everything we do in course work".

Many participants sought more help with practical skills, such as writing and APA guidelines: "Workshops on writing styles, format, and APA rules would be more helpful if they were offered on a rotating and continual basis --- you just need to be expert in these things if you are going to survive a doctoral program.". In terms of other types of skills, one second- year student noted that "the program has made me a much better researcher, and I look at research and asking questions in a different way now – in my professional practice, I feel that my decisions are based in research more as a result of this program".

As one graduate suggested, "I do not think that the doctoral program should be where I learn how to problem solve on the job but rather to help me frame the problems so that critical analysis and problem solving is more relevant and based on current research in the field…".

Dimension #3:
Faculty-student interactions: "It is a partnership…."

Most students commented on the intense faculty support and availability in the doctoral program and the way it encouraged their success and academic achievement. As one third year student declared, "One of the surprises of this program has been the incredible student-centered focus of the program and the helpful advice, honest concern, and willing availability of my faculty to support the students". Nearly all alumni agree that faculty were extremely helpful in the completion of their degrees. This is not surprising, since the literature finds that direct contact with faculty members is paramount to a successful program (Tinto,

1987; Weidman, 1989). Faculty are seen as essential partners in the dissertation process, rather than adversaries or 'road-blocks'; as one graduate said, "my advisor allowed me to go beyond my comfort zone in the application of the knowledge I needed to become an expert in my area…". Another graduate found that "…the best part of my experience with the program was the relationship I developed with my dissertation advisor, which was a surprising benefit of the process".

Phase Three participants warned that they felt disconnected to the program when they were enrolled in a course with a part-time faculty member, and even more so when they were enrolled during a semester when both of their courses were taught by adjunct professors. This dilution of the normal student-centeredness of the program caused some participants to express concern: "Since my success in this program is tied, in large part, to my connection with my faculty, the selection of adjunct faculty should be made carefully…". Finally, representing the sentiments of many other participants, a third-year student offered the following: "I am particularly impressed at how much support is provided by the full-time faculty, and I believe I will finish and accomplish excellent work because of them".

Dimension #4:
Personal and social growth: "Unexpected changes…"

Nearly all students and alumni report that their personal growth was significant as a result of their participation in the doctoral program. Phase Three qualitative findings further emphasize that personal growth, development of

professional identities, and relationships with their peers significantly improved or matured as a result of their program experience.

According to the literature, teamwork is a necessary skill for leaders (Pearce & Conger, 2003). Students agree that the program encourages collaborative teamwork and peer-to-peer learning. In fact, they suggested more and different opportunities to collaborate with each other, both inside and outside of class.

Personal and social growth was expressed by participants in other ways. One third-year student stated that "..you need to be prepared to learn about yourself, the good and the bad, your strengths and your weaknesses, if you are going to grow because of this experience…"., while another first-year student noted that "balancing the work-life-study challenges has been a bit overwhelming…". Finally, a current second-year student observed that "…the personal growth has been incredible, just feeling more confident in my abilities to try new things and not be afraid to fail the first few times… but my growth as a professional has been significant, as well. I have learned things I never even knew about a few years ago… and I am continuing to recognize abilities I possess that I never knew I had".

A graduate offered some pros and cons: "Overall, this was a great experience, despite the ridiculously hectic schedule of working and going to school full-time.. I believed in what I was doing and felt it was achievable because I found a strong sense of belonging and community among my peers, the faculty, and the doctoral staff. It was obvious that everyone is invested in our success!".

Dimension #5:
Sense of community: "The cohort is key…"

Many participants talked about the ways their respective cohorts bonded and worked together; alumni reflected on the continued connections they have with their classmates. "Our cohort continues to be close even 10 years after graduation; we bonded almost immediately and promised to support one another through degree completion"., said one graduate. A second-year student reflected that "…we hit it off as a group right from the first class sessions, and the high degree of professional expertise and the intellect that was shared is what has made this learning experience outstanding… but more than that, it is what has made me feel like I belong here". A third-year student highlighted the ways in which cohort members complimented one another by saying that "…I have benefited from being in a cohort where there are thinkers and doers…the thinkers force everyone to consider things like background, implications, larger issues, while the doers have the common sense and contribute to getting tasks accomplished!".

While participants felt a sense of community within their cohorts and felt that faculty were deeply interested in their academic concerns, when it came to feeling connected to the rest of the university, their responses shifted. Most programs and services were offered for undergraduate students and doctoral students did not always feel "part of" the larger community. A second-year interviewee complained that "… we are on the fringes in this institution! Our email is cut off during the summer, our card access doesn't work during the breaks, and many of the typical services are unavailable to us on Friday

evenings or on Saturdays… we are nearly invisible!". Many students felt that, outside of the doctoral faculty and staff, they were not taken seriously nor considered to be part of the larger institutional community. This feeling of living on the periphery affected their sense of affiliating with the institution, as a whole, and caused students and alumni bond only with the program.

Theme #6:
Overall Commitment to and Satisfaction with the College: "The privilege of the experience…"

Students and alumni strongly agreed that their experience in the doctoral program was an experience that would repeat, if given the chance. Participants were consistently supportive of the program and indicated that they had or would recommend it to others without reservation. One graduate furthered this sentiment by saying that "… the quality of the program and the support of the faculty makes me proud and I would like to encourage others to share the same experience…". Participants, however, stressed that potential students should understand the commitment and demands required of them, should they choose to enroll: "Know that it is a challenging commitment requiring tenacity, an open mind, a tolerance for ambiguity, and a willingness to sacrifice. Like most aspects of life, the program does not provide answers so much as the way to consider the questions… and despite some really rough moments, I would do it all over again!. A first –year student found that "…you should be prepared to acknowledge that the experience is a privilege, not a burden, and you should realize that you only get out of it what you put into it, so use your talents and energy for the 'good'". Participants, through interviews and self-reflection in their journal entries, expressed appreciation for the program and the value of the

experience, feeling that it had been the right place and the right choice for them, personally and professionally.

As a graduate asserted, “There isn’t anything in the program that will keep you from obtaining your doctoral degree except your lack of determination, vision, and sacrifice to reaching your goal…. !”.

Recommendations and Implications

Doctoral students require special programs and services to ensure their academic and personal satisfaction with their degree programs. While considerable attention has been paid to graduate student attrition, much of the research has viewed graduate students as extensions of undergraduates in terms of their motivations and needs. Specifically, minimal research has been conducted regarding the programs and services that appropriately meet doctoral student needs, ensuring their academic success and degree completion. The findings from this study indicate that a re-conception and re-structuring of doctoral student services is needed in order to support a new approach to doctoral student services programs.

Selected recommendations include:

- Refine orientation programs to include student panel discussions about the program and expectations, opportunities to meet fellow cohort members before the program begins, more of a chance to talk with program faculty, and an expanded introduction to the campus and the university;

- Expand doctoral research skills assistance, such as year-long courses in research methods, summer clinics, and a research 'help' center;
- Expand support programs in the areas of APA assistance and scholarly and academic writing;
- Increase peer-to-peer learning, more content in specific topic areas related to current trends in education or foundational areas;
- Develop guest speaker programming to relate coursework to current events and issues in education;
- Support personal and professional growth and development by creating additional opportunities for students to collaborate with each other, both inside and outside of class;
- Provide ongoing and specific information about the program and the university, via a variety of mediums (monthly "town meetings", student group discussions, alumni visits to classes) in order to help students feel increasingly connected to the institution.

Resulting Actions

The final phase of this research will hopefully augment the findings from Phases One and Two; the clarifying conversations with purposefully selected participants will assist doctoral faculty better understand how to develop and enhance curricular and support services to strengthen the educational experience for current and future doctoral students.

References

Antony, J. S. (2002). Reexamining doctoral student socialization and professional development: Moving beyond the congruence and assimilation orientation. In J. C. Smart & W. G. Tierney (eds.), *Higher Education: Handbook of Theory and Research, 52,* 249-380.

Bhattacharya, C. B., Rao, H., & Glynn, M. A. (1995). Understanding the bond of identification. *Journal of Marketing*, *59*, 46-57.

Bowen, W. G., & Rudenstein, N. L. (1992). *In pursuit of the Ph.D.* Princeton, NJ: Princeton University Press.

Brandes, L. C. O. (2006). Graduate student centers: Building community and involving students. *New Directions for Student Services, 115*. San Francisco: Jossey-Bass.

Caple, R. B. (1995). Counseling graduate students. In A. S. Pruitt-Logan and P. D. Issac (eds.), Student services for the changing graduate student population. New directions for student services, *42*. San Francisco, CA: Sage Publishing.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed). Thousand Oaks, California: Sage.

Elliott, K. M. (2003). Key determinants of student satisfaction. *Journal of College Student Retention, 4*(3), 271-279.

Fink, A. (2004). *The survey kit*. (2nd ed.). Thousand Oaks, CA: Sage.

Forney, D. S., & Davis, T. L. (2002). Ongoing transition sessions for student affairs master's students. *Journal of College Student Development*, *43*, 288-293.

Golde, C. M. (1998). Beginning graduate school: Explaining first-year doctoral attrition. In M. S. Anderson (ed.). The experience of being in graduate school: An exploration. *New Directions for Higher Education, 101*. San Francisco: Jossey-Bass.

Golde, C. M., & Dore, T. M. (2001). At cross purposes: What the experiences of today's doctoral students reveal about doctoral education. Retrieved October 28, 2009 from http://www.phd-survey.org

Gubrium, J. F., & Holstein, J. A. (2001). *Handbook of interview research: Context and Method*. Thousand Oaks, California: Sage.

Kim, M. M., Rhoades, G., & Woodard, D. B. (2003). Sponsored research versus graduating students: Intervening variables and unanticipated findings in public research universities. *Research in Higher Education, 44*(1), 51-81.

Krueger, R. A., & Casey, M. A. (2009). *Focus groups: A practical guide for applied research (*4th ed*)*. Thousand Oaks, California: Sage.

Krueger, R. A. (1998). *Developing questions for focus groups. Focus group kit*. Thousand Oaks, CA: Sage.

Ladik, J. (2005, May). *Recruitment and Retention in Higher Education*. Quinsigamond, MA: Quinsigamond Community College Press.

Lawson, T. J., & Fuehrer, A. (2001). The role of social support in moderating the stress that first-year graduate student's experience. *Education, 110*(2).

Lehker, T., & Furlong, J. S. (2006). Career services for graduate and professional students. *New Directions for Student Services, 115*. San Francisco: Jossey-Bass.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, California: Sage.

Lovitts, B. E. (2001). *Leaving the ivory tower: The causes and consequences of departure from doctoral study*. Lanham, MD: Rowman & Littlefield.

Lovitts, B. E., & Nelson, C. (2000). The hidden crisis in graduate education: Attrition from Ph.D. programs. *Academe, 86*, 44-50.

Morgan, D. L. (1997). *Focus groups as qualitative research.* Thousand Oaks, California: Sage.

Pearce, C. L., & Conger, J. A. (2003). *Shared leadership: Reframing the hows and whys of leadership*. Thousand Oaks, CA: Sage.

Polson, C. J. (2003). Adult graduate students challenge institutions to change. In D. Kilgore, & P. J. Rice (eds.). *New Directions for Student Services, 102*. San Francisco: Jossey-Bass.

Poock, M. C. (2004). Graduate student orientation practices: Results from a national survey. *NASPA Journal, 41*, 470-486.

Streeter, S. (1985). Changes in the characteristics of a self-selected group of

graduate psychology students during the course of participation in a support group. (Doctoral dissertation, California School of Professional Psychology, 1984). *Dissertations Abstracts International*, *46*(3-B), 972-980.

Tinto, V. (1987). *Leaving college: Rethinking causes and cures of student attrition*. Chicago: The University of Chicago.

Tinto, V. (2004). *Leaving college: Rethinking the causes and cures of student attrition.* (2nd ed.). Chicago: University of Chicago Press.

Weidman, J. C. (1989). Undergraduate socialization: A conceptual approach. In Smart, J. C. (ed.), Higher education: Handbook of theory and research, (V), 289-322. New York, NY: Agathon Press.

Weidman, J. C., & Stein, E. L. (2003). Socialization of doctoral students to academic norms. *Research in higher education, 44*(6), 641-656.

Weidman, J. C., Twale, D. J., & Stein, E. L. (2001). *Socialization of graduate and professional students in higher education: A perilous passage*. ASHE-ERIC Higher Education Report, *28*(3). San Francisco: Jossey-Bass.

Zigmond, M. J. (1998). Survival skills for graduate school and beyond. In M. S. Anderson (ed.). The experience of being in graduate school: An exploration. *New Directions for Higher Education, 101.* San Francisco: Jossey-Bass.