

Exploring Graduate Students' Experiences in a College of Agriculture



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Abstract

The past two decades have seen an overall increase in the number of students pursuing a graduate degree in the United States. Gaining a more nuanced understanding of how graduate students navigate the academic, personal, and professional challenges of post baccalaureate education will help programs better support them and ensure student success. With validation theory serving as the theoretical framework, the purpose of this study was to explore the graduate student experience within a college of agriculture at a southwestern university. This study focused on three aspects: resources students use, challenges they have experienced, and additional needs for support. Data for this phenomenological study were collected using focus groups with 24 students. Analysis of the data found students utilized a variety of resources including online content and peers. Another emergent theme recognized the significant role communication plays between faculty members and students. The final theme focused on solutions to support better communication and collaboration efforts. Several specific recommendations are provided to improve how validated graduate students feel in their academic pursuits. Future research should gather faculty perspectives to help shape professional development opportunities that would create enhanced graduate student mentoring.

Keywords: graduate students, validation theory, communication, experiences, resources

From 2009 to 2020, postbaccalaureate programs in the United States – master's and doctoral – experienced a 10% increase in enrollment from 2.8 million to 3.1 million students (National Center for Education Statistics, 2022). Graduate school provides the opportunity for students to have “advanced education and, potentially, a brighter future” (Hardgrave et al., 1994, p. 249). According to Hardre and Hackett (2015), these students' experiences are “unique because each brings different prior knowledge and experiences, current motivations and expectations, and future goals and aspirations” (p. 454). During their graduate careers, students balance being a student, teacher/research assistant, employees, and even a parent (Loizzo et al., 2022). Graduate students experience additional stress and demands from these many roles, especially in a post-COVID-19 world (Beattie et al., 2021).

Previous research has noted the role faculty members play in helping support students during their journey into scholarly careers (Hoffman, 2014). Anderson and Swazey (1998) noted that faculty have a responsibility to work individually and collectively to help improve the graduate student experience. Faculty mentorship is a key element in both doctoral student retention and success (Brill et al., 2014).

Bain et al. (2011) found graduate student success was connected to three aspects: faculty roles, financial aid, and community connectedness. Part of the faculty member's role is to help students believe in their own success. Regarding financial aid, Bain et al. (2011) found students need financial aid options with more affordable tuition rates. The most important factor for student success was community connectedness. Students want to feel connected to peers, faculty members, the department, and the graduate program

to overcome the “inherent loneliness that seems to be part of the graduate school experience” (Bain et al., 2011, p. 6). These factors have an impact on students’ success and whether they persist in their graduate education experience.

Hesli et al. (2003) found “the single best predictor of level of dissatisfaction with the graduate student experience is whether the graduate student receives sufficient encouragement, mentoring, and consultation from faculty” (p. 459). The support students receive from their institutions, department, and faculty advisers has the potential to affect their well-being and intentions to leave academia (Hunter & Devine, 2016). Offstein et al. (2004) argued that due to graduate students’ role in the teaching and research productivity at universities, more research is necessary to understand their concerns and identify ways to support them.

In 2022, Texas Tech University had 6,798 graduate students; 420 were enrolled in the Davis College of Agricultural Sciences and Natural Resources. Gaining insight of what graduate students are going through mentally, emotionally, and academically will provide a more comprehensive perspective of the graduate student experience and what is necessary to support their success.

Validation theory provided this study’s theoretical framework. Linares and Muñoz (2011) stated that validation can be found in intentional and proactive affirmation both in and out of the classroom. These affirmations influence a student’s success, which is connected to their experience within the university.

Validation is divided into two classifications: academic and interpersonal. Academic validation includes “actions that foster academic development” (Hurtado et al., 2011, p. 55) and can be both in-class and out-of-class. In-class validation is when the faculty member provides feedback regarding the students’ academic performance. This type of academic validation helps students gain confidence in being a college student (Rendon, 1994). Out-of-class academic validation may be from family members and friends. When in-class validation is absent, out-of-class validation replaces it for students and is equally as important as what goes on in the classroom (Rendon, 1994).

The second classification of validation is interpersonal, both in and outside the classroom. This classification addresses student success in terms of personal development and social adjustment, both curricular and cocurricular within an institution (Hurtado et al., 2011). “In a validating classroom, the instructor affirms students as persons, not just students. Faculty do not detach themselves from students. Rather, faculty build supporting, caring relationships with students” (Linares & Muñoz, 2011, p. 19). This validation helps students build relationships within the classroom with other students, which helps them build a social network to connect outside the classroom (Linares & Munoz, 2001). Rendon (1994) found all students need interpersonal validation, even those at a large research university. Helping students feel validated can lead to higher retention rates and more involvement in college experiences (Hallett et al., 2020). When students become active members of the college social setting, they have an increased likelihood of continuing their college career at the institution (Cuseo, 2012).

Purpose and Research Questions

The purpose of this study was to explore graduate students’ experiences in the Davis College of Agricultural Sciences and Natural Resources at Texas Tech University. The information gained from this study can be used to develop resources and mechanisms to support student success. The research questions were:

- RQ1: What resources have they found useful before and during their time as a graduate student?
- RQ2: What challenges have they encountered as a graduate student in the college?
- RQ3: What support should the college provide to address those challenges?

Methods

This qualitative study used a phenomenological approach, which attempts to describe the “common meaning for several individuals of their lived experiences of a concept or phenomenon” (Creswell & Poth, 2018, p. 75). The phenomenon researched in this study was the Davis College of Agricultural Sciences and Natural Resources graduate students’ experiences. As Gil et al. (2023) described, this approach to research seeks to “grasp these exclusively singular meaningful aspects of a phenomenon or event” (p.78). Focus groups were used to gather graduate students’ perspectives to provide a better understanding regarding the essence of their lived experiences. Focus groups use “guided, interactional discussion as a means of generating the rich details of complex experiences and the reasoning behind [an individual’s] actions, beliefs, perceptions, and attitudes” (Powell & Single, 1996, p. 499). The target population was on-campus graduate students within the Davis College of Agricultural Sciences and Natural Resources. Both domestic and international students were recruited to participate from each of the seven departments. With these parameters, we recruited students on research and/or teaching assistantships to participate in the focus groups.

Following IRB approval, we sent a recruitment email to on-campus students via members of the college’s Research and Graduate Studies Committee. This committee has a representative from each of the seven departments in the college. The recruitment email detailed the purpose of the study and included a link to sign up to participate in the focus group. The students completed a brief demographic questionnaire with questions such as gender, previous institution attended, and current degree being pursued. We also asked for their availability to participate in one of the focus group sessions. Their participation was voluntary, and they did not receive any compensation.

Four focus groups were conducted over three weeks in the spring of 2022 with 24 participants who represented all seven departments. Of those 24 students, 14 identified as female and 10 identified as male. Thirteen students were in a master’s program and 11 were doctoral students. Sixteen students were domestic while the remaining eight were international. The international students represented South America, Africa, Asia, and Latin America. Of the 16

domestic students in the focus groups, nine had received their bachelor's degrees from Texas Tech University.

Each focus group had five or six participants to ensure all students had an opportunity to share their opinions. The focus groups lasted 1.5 to 2 hours. The moderator for each session used a moderator's guide to provide consistency and ensure the research questions were addressed. The moderators were staff members who work in the college dean's office and do not directly advise or supervise the graduate student participants. The focus group discussions were audio recorded and transcribed using Otter.ai. This ensured each participant's response was recorded accurately. The moderators also took notes, focusing on key points brought up in the discussion. The transcripts and notes served as the units of analysis for the coding process. Student names were replaced with a participant number to ensure confidentiality.

Analytical coding was used to analyze the data, which "is used to make, celebrate, illustrate, and develop categories theoretically" (Morse & Richards, 2002, p. 119). Analytical coding allows the development of new categories and concepts and then compare data to what was found (Morse & Richards, 2022). The data were printed and analyzed by hand. The lead researcher read the transcriptions and identified the themes that addressed the study's research questions. Direct quotes were used to describe the emergent themes found throughout each transcription.

Findings

The data analysis identified three emergent themes to address the research questions: 1) Variety of Resources are Utilized, 2) Faculty-Student Communication is Challenging, and 3) Collaboration and Communication Lead to Solutions.

Variety of Resources are Utilized

Students brought forward multiple different resources they use to help them find success as well brought forward resources they wished they had. To address RQ1 regarding what resources graduates use or would like to have, the responses varied from interpersonal conversations to online materials. The primary interpersonal resource students use is the knowledge of their fellow graduate students who can help locate information they need for their assistantship, research, or classes. These peers provide valuable insight and information to fellow students just starting their graduate student careers.

Participant 1: I would say the most helpful resources are my peers, my colleagues. I can lean on them. I can confide in them confidently if something's going on, or I just truly need to talk. They have been my ultimate resources throughout grad school so far.

Participant 4: Other students for sure. Like anything, you can go and just ask. Like, did you have this problem? Did you take this class? How did you do this? Or how did you navigate doing a PhD with everyone.

Participant 2 said, "I would say your peers know more than your advisors do." After participant 2 said this, the others

in that focus group session agreed with the statement. They said their graduate student peers going through the program have expert knowledge, and their peers' feedback and advice was valuable to them.

Another resource participants said they truly enjoyed using was the library because it offered them opportunities to do research and study. While all participants said they utilize the library, the international students noted this was a helpful resource, especially regarding textbooks. Knowing they can check out books from the library on loan for the semester helped relieve financial stress. The library also helped them address in-class struggles with the content, and they utilized the online resources to find articles and textbooks to support class material. An example would be the use of the document delivery system through the library's website, which several participants spoke about using.

Participant 10: The most useful for me is the document delivery. They never let me down, like those resources are phenomenal. Just the ability to get almost any piece of literature that you need – papers, journal access – and in a very timely manner.

Participant 16: I was thinking the same thing, the library, the access to online journals, and even the speaking of how good their librarians are, the Document Delivery Service is always so fast, on a Friday at 4 p.m., I think I probably won't be able to get this; I'll have to start it on Monday, and I'll send in a request. And like 45 minutes later, it's in my inbox already.

A requested resource one student brought forward is to have someone they could speak with about issues and conflicts they may be having with faculty members.

Participant 4: There was a time when I started my Ph.D. when there was a new faculty hire in the department, and I took a class where that professor was outstandingly inappropriate. And it was really hard to figure out who to tell or to talk about that with him. It wasn't anything serious. It was just like little things and belittling students in class and just inappropriate in that sense.

During instances like these, participants provided suggestions such as hiring a therapist or a human resource manager who would allow them to talk about pressing issues in an open and judgment-free place. This would help relieve the stress and concern of potential consequences for speaking out about a faculty member and their behavior. This person could also help prevent these issues from being repeated and assist with conflict resolution.

Faculty-Student Communication is Challenging

Communication challenges between faculty and students were a topic of discussion that students brought forward. Participants noted that many challenges they encounter are due to ineffective communication between themselves and their faculty supervisors, which led to one emergent theme to answer RQ2. Through the conversations, participants said they were learning what needs to be included when speaking with faculty supervisors such as expectations, time

management, and indicators of success.

Participant 2: I think it would also be helpful if our advisors and faculty kind of knew how to answer those questions and point students in the right direction of getting those resources and also kind of outlining the expectations of an assistantship. Kind of what all that entails, like, what are you going to be doing? What are the expectations? How long are you going to have to be in the office? How are your hours divided up and stuff like that? Just truly what the assistantship looks like.

One example of this conversation was to clarify what part-time employment (20 hours per week) means to each faculty member.

Participant 8: For the summer, I was considered an undergrad research student. I wasn't on assistantship yet. I was hourly, and then when I started school, it's when I was considered under assistantship. So, I only had this conversation on a car ride from the research center to the university. And it was like "this could be your project. You could do a master's degree. I'll pay for your tuition, and you will be on an assistantship and get paid monthly." That's a conversation we had.

Participants emphasized the need to have conversations that lead to mutual understanding. Some said they struggled to establish boundaries and say "no" to their supervisor when asked to do too much.

Participant 2: I'd say with that, sometimes it's hard to approach your advisor about that stuff, especially if you are struggling with some of those internal thoughts a bit of, "Do I make a big deal about this or do I not?" Also, setting those boundaries with your advisor, I feel like is important. And it's sometimes difficult. It's difficult.

During the focus group sessions, some participants suggested approaching their advisor with concerns, whether it was personal or professional, though others said this was difficult to do. When students did approach their advisor about their struggles and mental health challenges, not all of them were handled properly. One participant shared an experience they heard about when a student approached their advisor about a struggle. This participant described the other student's perspective regarding the conversation and how it was handled.

Participant 6: The student even told their supervisor that they had gone to a doctor and prescribed medication. They relayed that to their supervisor and their supervisor was like, "OK, but let's just add into your research hours next week."

Participant 6 continued to describe this encounter and how the faculty member essentially dismissed the other student's mental health concerns and instead was only focused on the work responsibilities. (The faculty member's perspective was not sought for this study to keep the participant's identity confidential.)

Another challenge participants mentioned was faculty members not being there to support them throughout their academic journey. Participants said they sought faculty members to be mentors and help guide them through their

graduate school experience. They noticed that not all faculty members are fulfilling those expectations.

Participant 9: Students I share an office with will have to go knock on their advisor's door, then schedule an appointment two weeks out. This causes a lot of issues I know, then completing their research causes a lot of stress and they're not as productive. A question that they're held up on, they don't have anyone to go to for two weeks and it is time sensitive. In those two weeks, they might miss this opportunity. So that's also an issue.

Participant 15: They just have a lot of other responsibilities going on and I understand that but like I said, once again, I don't deserve to get shorted my experience just because someone else is very busy. That decision should have been made prior to applying for funding for a grant and then needing a grad student to work on that grant.

The final challenge participants mentioned was being in a toxic workplace environment when faculty members did not cooperate. Students said this tension makes the workplace unpleasant. Participant 8 stated that "the politics and the tension going on within departments is not affecting our work, but it for sure doesn't make us feel welcome." The participants said when these incidents occur, it makes them uncomfortable.

Another participant added it can be obvious when politics play a part in the department. This can be seen when cliques are formed and when there is lack of communication between faculty members.

Participant 9: I get along with most other college graduate students, but I can also tell between faculty members in our department, some of them definitely don't like others in the department. When department heads and faculty members have any kind of discord, you can kind of tell that. Especially if you're working closely with that faculty member.

Collaboration and Communication Lead to Solutions

Participants were active in their discussion when wanting to work together and communicate with each other to help find solutions. The emergent theme to answer RQ3 was to foster opportunities for collaboration and communication, which will lead to solutions. Participants said being able to speak about their challenges and concerns in graduate school will help identify areas that need improvement. One suggestion was to create organizations and programs within the Davis College of Agricultural Sciences and Natural Resources to help better communicate student challenges to faculty. This would allow the college to utilize current graduate student insights to improve new student experiences. One specific suggestion was a mentorship program, which would provide an opportunity to share experiences and assist students as they transition into Texas Tech University and their specific degree program.

Participant 20: Maybe like a mentorship program of students...we have great mentorship relationship with our advisors and with our faculty chairs. But

maybe you're finding somebody that's been through a year of grad school that you can relate to... faculty advisors have been really honest and very genuine in that too, but I think there's just something about a student/student relationship that's different from that.

Participant 10: Trying to facilitate a formal mentorship program. Whether that's faculty to grad students or just grad students to grad students as peer mentors, because I think one of the things I've enjoyed the most, and I also got the most benefit out of, is getting to mentor other master's students. I know that when I was in my master's, there's a steep learning curve from undergraduate programs to graduate programs. There's a steep learning curve from your master's to your Ph.D. I can think of three very formative Ph.D. students that pushed me and so getting to give back to other master's students...also teaches you as well.

Participants agreed a college-level graduate student organization would be beneficial to help make improvements and solve issues, such as having better contact with the dean's office. It would also help address concerns within departments from the student's perspective. For the organizational structure, participants suggested each department's graduate student organization provide a representative to be the voice of that department's students and bring forward concerns that need to be addressed.

Participant 22: Some of the graduate students from there will have some suggestions or complaints and then maybe like once a month, each of the presidents from each of those organizations kind of like meet up, you know, and then talk it out, basically see what's going on and maybe have someone that's there from the Davis College of Agricultural Sciences and Natural Resources that can make those changes.

One participant said this type of organization would especially benefit students in smaller departments because it would create opportunities for college-wide collaborations for research and teaching.

Participant 24: I don't know how many graduate students your guys' departments have, but ours is very small. I mean, to me, something like that could also be a means for collaboration. It's like, we know what somebody's doing, wants to do research on this. It's like, well, somebody in my department's kind of doing something similar.

Participants also expressed interest in more opportunities to meet with faculty and graduate students from different departments. Participants mentioned the Davis College of Agricultural Sciences and Natural Resources is a family, so to start embracing that and creating these social events would help them network and build these connections. This would allow them to ask questions and get necessary resources for their research and foster interdisciplinary work.

Participant 19: I know that building those socials and creating those interactions are difficult because pulling people together from different origins and even departments is not that easy. But once you're

able to do it, to grow in research and scholarship as a whole, you will be grateful for the college as a whole.

Students suggested having a networking event to include professionals within the agriculture industry. This would give students the opportunity to understand what is needed from industry partners in terms of jobs and research. Participant 4 said, "I know that if you were to just get reps from a company. They would have the knowledge of...openings all over the country or even internationally." Participant 1 agreed with this sentiment and said, "Companies that are within the agriculture industry would be present so that there are a lot of options. This will help us see the opportunities out there and who we would want to apply with." This event could also provide a place for them to mingle with faculty and students from the various departments.

Students said the connections formed at that type of event could lead to possible collaborations and interdisciplinary work, which would benefit the college by expanding the participants' professional network, introducing them to new research areas, and providing an opportunity to showcase the work graduate students are doing in the college. Participant 10 said, "There's probably a time that you're going to need help from others than just your lab group. Even just general advice and... purposeful exposure that comes with team building activities that can be facilitated through a department."

Another participant brought up the idea of going beyond just college-wide collaboration to encourage university-wide collaboration. One participant mentioned difficulty in trying to collaborate with others outside of the college. The general tone was to find ways to bridge the gap across disciplines across campus. Participants said networking opportunities will improve their research and create connections within the industry to better prepare them to enter the workforce. They recognized these opportunities allow them to expand their knowledge and skills within the college, university, and beyond.

Discussion & Conclusions

As more students consider graduate school, it is important that efforts are made to validate their efforts and support student success (Bain, 2011). This needs to occur during their entire time as a graduate student – before, during, and after their experience. The study's findings reinforced the crucial role of effective communication with faculty mentors to support graduate student success. When students and faculty have established rapport and connection, students feel more supported to work independently and feel more enabled to ask for help when needed (Hardre & Hackett, 2015). Participants identified a variety of communication channels they used to gather information or find answers to questions, but the primary source was interpersonal, specifically fellow graduate students. By promoting interpersonal validation through communication practices, graduate students can create support networks comprised of both faculty and peers.

Throughout the focus group discussions, participants noted some issues in communicating with their faculty advisers or supervisors. Hoffman (2014) noted that when

faculty members do not show caring and respectful behavior toward students, the students are led to believe the faculty members have given up on them and their education. According to Waldeck et al. (1997), professors should attempt open communication and practice both verbal and nonverbal immediacy in their classroom and during informal advising sessions. Open communication both in and outside the classroom provides students with validation regarding their academic progress and reinforces positive personal development (Rendon, 1994). Graduate students often interact with faculty to accomplish essential tasks such as completing research, managing lab space, and serving as teaching assistants. Participants in this study noted the need for validation that they were appreciated in these roles and identified the need to feel supported as students and individuals. As Cuseo (2012) noted, "student success is more likely to be realized when students feel personally significant" (p. 3).

Participants expressed the desire to be better connected to each other and to professionals in the agricultural industry. This is related to interpersonal validation, which addresses student success outcomes relevant to personal development and social adjustment (Hurtado et al., 2011). Graduate students can realize this classification of validation through curricular and co-curricular activities. The participants' suggestions regarding networking events, graduate student organizations, and other opportunities for collaboration would help them realize this type of validation and support student success because they are building relationships with others.

Summary

Gaining a better understanding of graduate student experiences can help ensure colleges of agriculture are developing appropriate strategies to foster student success. The findings of this study underscored that students need and appreciate support to overcome challenges they face in their academic pursuits. The participants recognized this support can come from a variety of sources – faculty members, each other, and campus resources. Another major finding of this study is the crucial role communication plays when students are working with their faculty supervisors. From having honest conversations with faculty about mental health concerns or seeking input on a research project, students noted that when communication was ineffective, it led to more stressful situations. While communication was identified as an obstacle at times, students acknowledged that enhancing communication strategies could also provide solutions. They recommended the creation of a peer mentorship program so they could learn from and support each other. Another recommendation was to create a graduate student advisory council with representatives from each department in the college. Members of this council would bring forward areas of concern and have discussion about potential changes to implement. Providing students with the opportunity to serve an active role in identifying shared concerns and proposing practical solutions will help them feel more connected to the college and each other while establishing programs to benefit future graduate students.

Based on the small sample size and qualitative nature of this study, the findings are not generalizable to a larger population. However, the conclusions and recommendations are transferrable to similar graduate programs in colleges of agriculture. Additional research is needed to gather perspectives from more graduate students to further describe what challenges they face and identify support strategies. The participants in this study noted the significance of effective communication (or lack thereof) with their faculty advisors and/or supervisors. The diversity of communication preferences found in the current multi-generational workforce presents both opportunities and challenges when applied to graduate education. Additional research should explore what techniques or strategies would help students develop stronger working relationships with their faculty counterparts. This study did not seek input from faculty members in the college. It would be beneficial to collect their perceptions of mentoring and advising graduate students to identify areas that confirm the students' perspectives and other areas of distinction. Future research could include data collection from other universities to recognize college-specific challenges and opportunities and what areas are more comprehensive regarding the graduate student experience.

For recommendations for practice, efforts to improve communication between graduate students and faculty members will improve the overall graduate student experience. Faculty members should actively listen to the students' concerns, questions, and perspectives. Prioritizing accessibility, clarity, and prompt replies for assistance would instill more trust in the faculty member-graduate student relationship. Gradual improvements in this area would improve overall comradery in the departments and college. Participants also suggested starting mentorship programs to help enhance the communication between graduate students and faculty members. This would provide valuable training to create a better culture of graduate student support. Another suggestion was to start a college-level graduate student organization so students can meet others across the college to extend their personal and professional network. Overall, multiple strategies should be introduced to encourage effective communication and promote networking, which will support student success.

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