

A Survey of Communication Sciences and Disorders Undergraduate Students' Research Experience and Interest in A Master's Thesis and PhD Degree

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Despite the shortage of PhDs in Communication Sciences and Disorders (CSD), limited research has focused on undergraduate student research in the field and interest in completing a master's thesis or PhD. CSD undergraduate students were surveyed to determine if they are participating in known opportunities for research and if undergraduate research experience is related to interest in pursuing a master's thesis or PhD. Invitations to complete the electronic survey were dispersed to undergraduate program directors of approximately 200 Council for Academic Accreditation–accredited CSD programs. Program directors were asked to send the survey to eligible undergraduate students, from which 309 chose to participate, and 275 completed the survey in full. Results indicated that although most students were aware of research opportunities, only 25% of respondents engaged in research. Approximately half of the respondents were interested in pursuing a master's thesis and over 1/3 in a PhD. The odds of having an interest in completing a master's thesis or a PhD were 37% higher and 51% higher, respectively, for students who engaged in undergraduate research. However, the odds ratios were not statistically significant ($p > .05$). The results suggested that undergraduate research experience may influence interest in pursuing a master's thesis or PhD.

PhD Shortage

Evidence suggests a deficiency of speech-language pathologists trained at the doctoral level (McNeil et al., 2013). The 2013 Academic Affairs Final Report projected 408 full-time faculty vacancies for 2012–2017, with only 279 PhD-level research doctoral candidates likely to graduate within the same time period (Crais et al., 2015). This translates to 31.6% of open faculty positions remaining unfilled. A survey by Hull and Coufal (2009) revealed that approximately 90% of Communication Sciences and Disorders (CSD) programs did not have a sufficient number of PhD candidates to fill the available faculty positions, and over 55% of programs did not receive applications for their faculty searches. The American Speech-Language-Hearing Association (ASHA) has acknowledged the dearth of PhD students for decades and has made numerous efforts to ameliorate what has been deemed a crisis for the profession (Ingham, Oller, & Wilcox, 2002). Such efforts may have contributed to the 12% increase in CSD faculty age 40 years or younger between 2002 and 2012, which will help offset the 11% increase in PhD faculty who are age 61 years and older (McNeil et al., 2013). However, the median age of PhD faculty in communication disorders increased from 53 years in 2002 to 56 years in 2015, and continuing aggressive and immediate

efforts are required to increase the number of students and speech-language pathologists who pursue a doctoral degree (ASHA, 2015). According to McCrea, Creaghead, Goldstein, O'Rourke, and Ryals (2008), the Survey of Earned Doctorates data indicated a 5.1% national increase in research doctorates in any field from 2005 to 2006 across all surveyed institutions. Although there was a positive national trend and an increase in CSD doctoral degrees conferred in 2006, the completion of PhDs in CSD has remained fairly stable over the last 20 years. The report concluded that concerns remain regarding a sufficient number of PhD graduates assuming faculty positions, both nationally and in CSD.

The reality of the lack of CSD academic faculty has the potential to compromise the academic credibility of programs nationwide, deteriorate the knowledge base to sustain the profession, and weaken evidence-based practices that support clinical practices (Friberg, Folkins, Harten, & Pershey, 2013; Mueller & Lisko, 2003). Additionally, insufficient faculty for nationwide program maintenance and growth may lead to limited admissions. This may result in fewer clinical professionals and restricted access for those in need of services.

Factors Influencing Research Pursuit

Many surveys have investigated why few graduate students are interested in doing research or pursuing a PhD. Madison, Guy, and Koch (2004) found that a lack of research interest was one of the three top reasons for not pursuing a PhD, and Myotte, Hutchins, Cannizzaro, and Belin (2011) identified lack of interest in doctoral studies and financial concerns as the top reasons. Davidson, Weismer, Alt, and Hogan (2013) surveyed master's-level students and CSD faculty to determine their perspectives on pursuing a PhD and the role of the faculty member. The biggest deterrent was not apprehension about teaching but the need to develop research projects. Other concerns were related to family obligations and the time and financial demands of doctoral studies. They suggested that students may be discouraged by the ambiguity of the process rather than the rigors associated with research. All the students who indicated that they were considering, interested, or definitely interested in pursuing a PhD had previous and/or current research experience. Further, many faculty responses indicated that undergraduate and master's-level research experience motivated the pursuit of their own doctoral degree. Friberg et al. (2013) suggested that students may not find research to be fulfilling and may even see research positions as ostentatious. However, Mueller and Lisko (2003) noted that experience with undergraduate research can establish excitement for the demands and rewards of research. A majority of the representatives surveyed from Council of Academic Programs in Communication Sciences and Disorders programs felt that undergraduate research experience may facilitate the pursuit of a PhD (Mueller & Lisko, 2003). This suggests that involving students in research at the undergraduate and graduate levels is critical to equipping students to make informed decisions about whether to pursue a PhD. Uniquely, Witter and Brackenbury (2014) surveyed undergraduate students in CSD regarding their interest in a PhD and their levels of demonstrated and perceived knowledge about a PhD. Students defined and explained aspects of a doctoral degree for demonstrated knowledge and subjectively ranked their level of knowledge (e.g., very knowledgeable, somewhat knowledgeable, limited, almost no, and no) for perceived knowledge. Results revealed that undergraduate students have limited knowledge and interest in the PhD. Although demonstrated knowledge of the PhD did not suggest greater interest in the degree, students' perceived knowledge related closely to interest in pursuit of a PhD. Data analysis revealed that demonstrated and perceived knowledge of the PhD were significantly influenced by direct research experiences.

CSD Responses

A joint ad hoc committee on PhD shortages in CSD composed of ASHA and Council of Academic Programs in Communication Sciences and Disorders representatives determined that only talking to undergraduate and graduate students about pursuing a PhD has not been sufficient for garnering interest (Ingham et al., 2002; McCrea et al., 2008). There have been recent initiatives

to involve undergraduate students in research. For instance, ASHA has established scholarships, Promoting the Next Generation of Researchers and Students Preparing for Academic Research Careers, to support student researchers (Friberg et al., 2013). Across CSD programs, undergraduate students are invited to engage in research at various levels, including completing undergraduate theses, conducting literature reviews, and collecting data. Graduate students involved in research may complete master's-level theses or assist faculty with tasks related to new or ongoing projects.

Challenges in Allied Professions

Other professional disciplines are acting to address shortages in the number of students pursuing PhD degrees and academic careers. The fields of occupational and physical therapy are facing similar threats to recruiting and retaining PhD faculty and have developed ad hoc committees to address the concerns (Blackinton et al., 2015; Hoerl, Bortone, Foss, & Jedlicka, 2008). The ad hoc report for occupational therapy indicated vacancies in 8%–10% of faculty positions and reported responses to a 2007 survey of occupational therapists (Hoerl et al., 2008). These occupational therapists expressed concerns regarding financial issues, the transition from a clinician to novice professor, and work–life balance. Additionally, faculty salaries and benefits were not competitive with other clinical positions, and there were few options for financing education. Although physical therapy is also experiencing a shortage, differences in terminal degrees make direct comparison to speech-language pathology difficult.

Nursing is another discipline that is experiencing a shortage of doctorate-level faculty. Fang and Bednash (2017) surveyed doctoral nursing students on variables affecting pursuit of careers in academia. Barriers included financial concerns, a negative perception of academia, and a lack of confidence in teaching.

Purpose

The purpose of this study was to gain insight into undergraduate students' experiences with research and the decision-making process in choosing to complete a master's-level thesis and a PhD. The premise of the design was that research experience early in the career of the CSD student may increase the likelihood of pursuing a master's-level thesis and, ultimately, a PhD. This study aligns with the suggestion by Davidson et al. (2013) that future studies consider surveying undergraduate students to discover perspectives of research and to assess when research interest begins.

The specific aims were to investigate (a) whether or not undergraduate CSD students are participating in known research opportunities, (b) how closely undergraduate research experience relates to interest in completing a master's thesis, and (c) how closely undergraduate research experience relates to interest in completing a doctoral degree. The information gained from analysis of this survey may provide academic programs with insight regarding the influence that undergraduate research experience has on the pursuit of future research endeavors.

Method

Participants and Procedure

Investigators recruited undergraduate students enrolled in CSD programs accredited by the Council for Academic Accreditation aged 19 years and older to participate in the survey. Undergraduate program directors of approximately 200 Council for Academic Accreditation–accredited programs nationwide were contacted via e-mail and asked to disperse the e-mail to their eligible undergraduate students. The e-mail contained the recruitment script, information letter, and web link to the online survey. A reminder e-mail was sent to each program director 2 weeks after the initial e-mail to encourage participation. Auburn University students were recruited in person prior to receiving the e-mail to encourage their involvement. Once receiving the e-mail, all students who wished to participate completed the online survey via Qualtrics by clicking on the provided link. Consent was implied for participants by completing the survey.

Responses were anonymous and stored without identifying information on the Qualtrics server. The project was approved by the institution's review board.

A total of 309 students initiated the survey. Of those students, 31 did not complete the survey in its entirety, and three were below the age of 19 years, so their data were not included. This yielded data for 275 respondents. An additional 25 students did not plan to go to graduate school in speech-language pathology and received a conditional survey, ending after Question 12. Their responses to Questions 1–12 were included, but they did not contribute to Questions 13–25. The data for any question to which fewer than 275 responses were obtained are reported as a percentage of the total number of responses for that item.

Participants represented 40 universities across the country and represented all five geographic regions. Demographic information is listed in Table 1.

Table 1. Demographics.

	<i>n</i>	Percentage
Age		
≤18	3	1.09
19–22	230	83.64
23–29	31	11.27
30+	11	4
Gender		
Male	6	2.21
Female	266	97.79
Reported race		
White/Caucasian	216	79.70
Hispanic/Latino	24	8.86
Black/African American	12	4.43
Asian	8	2.95
American Indian/Alaskan Native	2	0.74
Native Hawaiian/Other Pacific Islander	2	0.74
Other	7	2.58
Expected graduation		
Within 6 months	106	38.97
Within 1 year	50	18.38
More than 1 year	116	42.65
Geographic regions represented by respondents		
Midwest	88	32.47
Northeast	48	17.71
Southeast	61	22.51
Southwest	13	4.80
West	61	22.51

Survey Instrument

A 25-item electronic survey was designed to address the research questions (see Appendix A). The survey was created using Qualtrics, an Internet-based survey program. The anonymous data were analyzed by the investigators using descriptive statistics. Open-ended questions were analyzed qualitatively for themes in responses. The survey was estimated by Qualtrics to take 5 to 10 min to complete. First, respondents were asked to answer questions regarding demographic information. Other items obtained information about the students' prior knowledge of master's theses and whether the university of enrollment provided opportunities for undergraduate research and a PhD program. Finally, several items queried their future plans, including interest level in completing a master's-level thesis and PhD, variables that would affect the pursuit of a master's thesis, and if they felt they had enough information to decide to pursue a master's thesis. The last question invited open-ended comments.

Results

Statistical Analyses

Descriptive statistics were completed using Qualtrics to characterize the frequency and percentage of complete responses. Odds ratios were completed to analyze interest in PhD and interest in master's thesis. The odds ratios represent the relative likelihood of holding some interest in pursuing a PhD or master's thesis, given undergraduate research experience as compared with those without such experience.

Undergraduate Research Experience

When asked if the participant's current CSD department offered opportunities for undergraduate research, 85.7% of the 271 respondents answered yes. Despite such a large number of programs offering undergraduate research, only 25% of the 272 respondents reported research experience through their CSD department, and fewer students (8.9%) reported that they were working toward or had completed an undergraduate level thesis. The average number of hours spent on research each week for the 68 students participating in undergraduate research are reported in Table 2.

Table 2. Average number of weekly research hours.

	<i>n</i>	Percentage
Research hours per week		
≤1	16	23.6
1–5	38	55.9
6–10	11	16.2
>10	3	4.5

Master's Thesis Education and Decision Making

Of 247 respondents, 78.2% were aware that many graduate schools offer the option to complete a thesis or complete a comprehensive exam. When asked if the students received education regarding the thesis route, only 11.8% stated that they had received any education. In addition, only 13.4% stated that they felt they had received enough education to make a decision regarding a master's thesis or nonthesis option. The sources of education identified by the 29 students who reported receiving information are reported in Table 3. The majority of education that students received came from a professor or department representative.

Table 3. Sources of education on master's thesis.

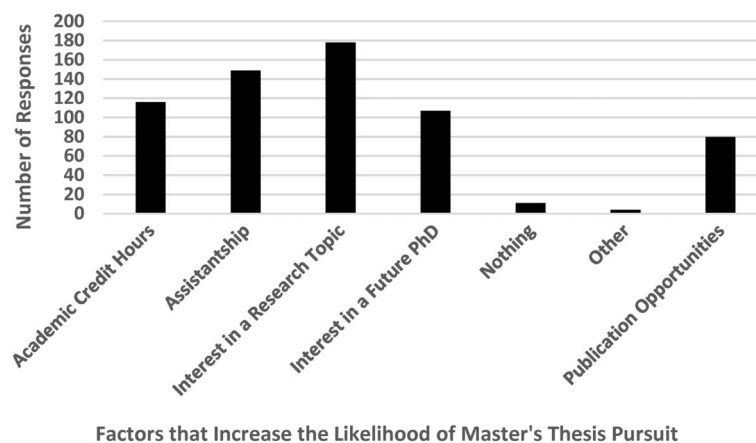
	<i>n</i>	Percentage
Source		
Undergraduate advisor/professor	12	41.4
Graduate program representative	9	31.1
Internet	5	17.3
Other students	0	0
Mentor/other undergraduate program/open house	3	10.4

While few respondents felt they had enough information to make the decision, their pending graduation date affected the outcome. Of those respondents who were scheduled to graduate within 6 months, 24.5% felt they had enough information to make the decision, compared with only 4.2% who were expected to graduate in a year or later.

Factors Influencing Master's Thesis Pursuit

The majority of respondents reported that, when choosing a graduate program, having the option to complete a thesis was not influential to the decision. Alternatively, more students indicated that they were interested (13% very interested; 43.8% somewhat interested) than not interested (14.2%) in completing a master's thesis. Over a quarter of the students (29.2%) were undecided. More than half of the respondents indicated plans to apply for a graduate research assistantship, with financial assistance as the main motivation (64.7%). Respondents were asked to choose any applicable factors that would increase the likelihood of pursuing a thesis (Figure 1). All options provided on the survey appealed to at least some students. Interest in a specific topic and assistantships yielded the greatest number of responses. Respondents were encouraged to include any other factors not already listed. Trends in responses included the need for more information and visibility of the process.

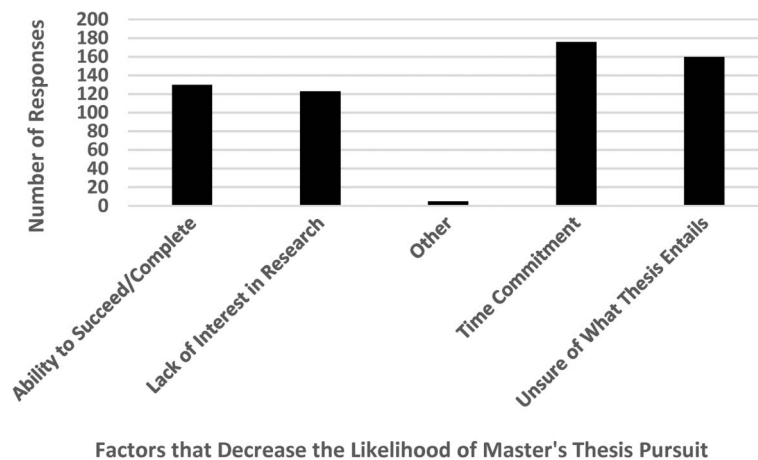
Figure 1. Factors that increase the likelihood of master's thesis pursuit.



Students were also asked to select all applicable factors that would decrease the likelihood that they would choose to complete a master's thesis (Figure 2). The students' concerns about the time commitment and uncertainty regarding what a thesis entails yielded the greatest number of responses. Respondents who noted additional factors not already listed indicated the rigor

associated with a thesis, lack of funding, monetary commitments, concerns regarding adequate mentorship, and jeopardizing clinical growth.

Figure 2. Factors that decrease the likelihood of master's thesis pursuit.



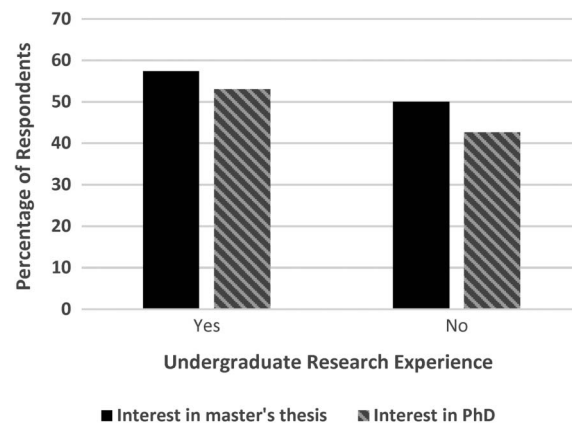
Interest in Master's Thesis

The 247 students that indicated they had plans to attend graduate school in speech-language pathology reported their interest in pursuing a master's thesis. Of those who had undergraduate research experience ($n = 68$), 39 respondents indicated that they were very or somewhat interested in pursuing a master's thesis. Of those without undergraduate research experience ($n = 204$), 101 respondents indicated that they were very or somewhat interested in pursuing a master's thesis. The odds of holding some interest in conducting master's research were 37% higher given undergraduate research experience ($p = .26$). However, this odds ratio was not statistically significant.

Interest in PhD

When asked about interest in pursuing a PhD, approximately half (49.8%) of the 247 respondents were very or somewhat interested. Of those who had undergraduate research experience ($n = 68$), 36 respondents indicated that they were very or somewhat interested in pursuing a PhD. Of those without undergraduate research experience ($n = 204$), 87 respondents indicated that they were very or somewhat interested in pursuing a PhD. The odds of holding some interest in pursuing a PhD were 51% higher given undergraduate research experience ($p = .14$). However, the odds ratio was not statistically significant. A comparison of the percentage of students interested in a master's thesis or PhD given undergraduate research experience is depicted in Figure 3.

Figure 3. Undergraduate research experience.



Additional Student Comments

At the end of the survey, there was an option for additional comments. Twelve comments were submitted, and the direct quotes of the respondents are listed in Appendix B. Thematic trends in comments related to financial concerns of prolonging education and a lack of confidence, experience, and knowledge regarding research. A student that conveyed excitement about research reported completing an undergraduate course that focused on research methods, which subsequently positively influenced the student's outlook toward research and the decision to complete a master's-level thesis. Two students proposed that undergraduate students or students early in their education be exposed to the possibility of a master's thesis and research procedures.

Discussion

Although the majority of undergraduate students acknowledged CSD research possibilities, few were taking advantage of the opportunities, and even fewer were completing an undergraduate thesis. When choosing graduate programs, students were not influenced by research interests or the option to pursue a thesis. The main concerns regarding pursuing a master's thesis were the time commitment and limited education on what a thesis entails. These concerns align with those in occupational therapy and nursing (Fang & Bednash, 2017; Hoerl et al., 2008).

Implications of these data highlight the importance of faculty sharing opportunities with students and explaining research expectations. Although not a statistically significant difference, a greater number of students with undergraduate research experience were interested in pursuing a master's thesis or PhD than those without undergraduate research experience. It is unclear whether the experience of undergraduate research increased their interest in further research or if that level of interest was present prior to any research participation.

The survey examined students' reported education about the thesis or comprehensive exam option for graduate school. The data represent the level of preparedness to make a decision about a master's-level thesis, and they are consistent with the findings of Witter and Brackenbury (2014) that students do not have adequate information to make informed decisions about their potential as doctoral candidates. Students more advanced in their education in this study were more knowledgeable about master's thesis options. Similarly, Witter and Brackenbury (2014) found that more advanced students had more knowledge of the PhD.

Results of the current survey and the undergraduate and graduate student surveys from Witter and Brackenbury (2014) and Davidson et al. (2013), respectively, revealed that only a

minority of respondents were uninterested in pursuing a PhD. It is clear that students need more education and support because many students are interested at some level in the PhD and master's thesis, and data suggest that the belief of having significant knowledge of the PhD relates to increased interest in pursuing the degree (Witter & Brackenbury, 2014). Additionally, open-ended comments from this study support the need for further education about research methods in order to foster interest in CSD research at all levels.

Limitations

One of the strengths of this study is the relatively large sample size. The respondents represented a large number of universities, with the exception of a low level of representation from the southwest region. There were several limitations and factors that could have influenced results. First, the survey responses were based on students' awareness of the education they received from their respective departments and their knowledge about opportunities for research and PhD programs. It is possible that programs and universities did offer research options for undergraduate students, but the respondents were not aware of such opportunities. Second, students were neither asked to identify what activities they considered "research experiences," nor provided with examples of research experience, which may have led to fewer reports of relevant opportunities. Similarly, students may not have been aware of whether their CSD programs offered a PhD. Third, the validity of the survey instrument was not established prior to use in the study, which may have influenced the data. A final consideration is the students who chose to answer the survey. It is possible that students who chose to respond to a survey regarding undergraduate research and master's theses had an increased interest level in research.

Implications for Educators

The authors agree with others (e.g., Mueller & Lisko, 2003; Scott & Wilcox, 2002) that faculty and programs at all levels of CSD have a stake in the doctoral shortage, and therefore, we must all be involved in encouraging student interest. ASHA has made efforts to amend the problem, but individual CSD programs may be best equipped to address the shortage, by actively engaging students in research across the undergraduate curriculum and presenting the PhD as a practical option from the beginning of their education (Witter & Brackenbury, 2014). In fact, the joint ad hoc committee in CSD suggested revising the undergraduate curriculum to promote academic careers and increase scientific rigor (Ingham et al., 2002; McCrea et al., 2008).

Other authors have made recommendations for increasing interest in completing a PhD. The investigators believe that the same suggestions may be translated to increasing interest in a master's thesis, which may lead to increased interest in a PhD. Davidson et al. (2013), Myotte et al. (2011), and Witter and Brackenbury (2014) identified several suggestions for increasing interest in pursuing a PhD, since simply being aware of the option of a PhD was not adequate to generate student interest. These included promoting a more positive image of research and the PhD early in the education and encouraging students to identify research opportunities with mentoring early in their education. Informal seminars, brown bag lunches, informational meetings, and open discussions with advisors and faculty were also recommended. These authors also suggested that introductory undergraduate CSD classes offer the same for undergraduate research and discuss the option to complete master's theses in the undergraduate program. Fisher (2013) recommended that occupational therapy graduate program directors select students who exhibit potential to educate others and encourage them to pursue a PhD. Undergraduate CSD program directors could collaborate with faculty teaching undergraduate students to do the same for undergraduate research and a master's thesis.

The Academic Affairs Board sought to determine how to better prepare and motivate undergraduate students for a PhD career (Crais et al., 2015). The answer was composed of

suggestions for making the PhD route attractive and accessible, highlighting scientific rigor, career options, and career satisfaction, and offering research opportunities to those interested in a PhD to build technical skills and to stimulate excitement about research. Of equal importance, the Academic Affairs Board suggested addressing the personal and positive aspects of a PhD in CSD (Crais et al., 2015). Davidson et al. (2013) supported providing group and individual opportunities for faculty to be transparent about job satisfaction and the advantages of completing a PhD. Survey data revealed that, whereas faculty found the job to be rewarding, students did not view a faculty position as such. Students may also benefit from open discussions with PhD students about their research responsibilities and decisions to pursue the degree. Similar recommendations have been made in other fields. Fang and Bednash (2017) found that nursing students planning to pursue a career in academia had increased exposure to teaching, research, and leadership development activities and were more likely to report being mentored by a faculty member who fostered their interest in academia. Evans (2013) also noted that a faculty mentor enhances a student's interest in higher education.

Storkel (2015) described a skill progression for student engagement in research, which begins with exposure to research questions and methods. Faculty may consider adding one or more of the following to their courses: guided reading of journal articles, simulation of research tasks, and basic statistics education. Perhaps, students are reticent to consider themselves researchers because they have not been instructed in these basic skills. Friberg et al. (2013) suggested alternate models for research engagement that decrease time demands on students. The students' contribution to a portion of a research study could include reviewing and summarizing literature, collecting and/or analyzing data, or replicating previously published studies. One student from the current survey recommended an undergraduate course that included research projects, and another student noted that the mock research project she had done in class influenced her decision to write a thesis. Professors should be cognizant of the possible impact they can have on students by being transparent about their job responsibilities and satisfaction and by incorporating research instruction in their courses.

Results from this study are encouraging in that half of the students are interested in pursuing a master's thesis and, ultimately, a PhD. However, the suggestions for increasing student interest in a master's thesis and, ultimately, a PhD track require a time investment from faculty members in order to formally and informally educate students on these matters. Promoting the Next Generation of Researchers and Students Preparing for Academic Research Careers were created by ASHA to support young researchers and those interested in a PhD, but faculty need to ensure that students are aware of these programs to take advantage of them. Although undergraduate students are encouraged to seek research opportunities, this places an increased workload on CSD faculty in programs that may not be fully staffed. It is unlikely that CSD faculty could provide mentorship if all undergraduate and graduate students pursued research. If faculty follow these suggestions for increasing student interest and involvement in research and the pursuit of a thesis or PhD, the investment of an enormous amount of time will be required on their part. Faculty who take the initiative to incorporate any of these recommendations into their established responsibilities will require support and encouragement. CSD program administrators and their respective universities need to acknowledge, support, and reward faculty as they spend time guiding young researchers in their pursuits. This may be accomplished by providing release time for projects involving undergraduate and graduate students, financial incentives for faculty and research projects, or grant opportunities.

Summary

Results from this study reveal that the percentages of students interested in pursuing a master's thesis or a PhD were higher for those students who had participated in undergraduate

research. Igniting undergraduate student interest to participate in research and subsequently complete a master's thesis could serve as a catalyst for the future pursuit of a PhD. The percentage of students interested or undecided about pursuing a master's thesis and PhD implies that faculty need to take the initiative to engage and educate students about the PhD and that departments and universities must support these faculty.

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Appendix A. Survey

Age:

18 or younger (survey ends here)

19–22

23–29

30+

Gender:

Male

Female

Race:

American Indian/Alaskan Native

Asian

Black/African American

Hispanic/Latino

Native Hawaiian/Other Pacific Islander

White/Caucasian

Other: Specify

When do you expect to graduate with your undergraduate degree?

Within six months

Within one year

More than one year

With what university are you currently enrolled?

Does this university offer undergraduate research opportunities through your communication disorders department?

Yes or No

Do you have research experience through your communication disorders department?

Yes or No

What is the average estimated number of research hours required per week?

< 1

1–5

6–10

More than 10

Are you in the process of or have you completed an undergraduate level thesis?

Yes or No

Does your current university offer a PhD program?

Yes or No

Do you plan to attend graduate school in Speech-Language Pathology?

Yes or No

If you are not planning to attend graduate school in Speech-Language Pathology, why not?

Pursuing an AuD degree

Pursuing another degree outside communication disorders

Planning to work upon graduation without pursuing additional degrees

Planning to work before pursuing additional degrees

Other: please specify

Are you aware that some graduate programs offer students the option to complete a thesis or take a comprehensive examination as a graduation requirement?

Yes or No

Have you received any education regarding the thesis option for graduate programs?

Yes or No

Where did you receive your information regarding the thesis option for graduate programs?

1. Undergraduate Professor/Class/Advisor
2. Graduate Program Representative
3. Website/Online
4. Other students
5. Other: please specify

Have you received enough information to decide whether or not you will pursue a thesis?

Yes or No

Are you interested in pursuing a thesis in graduate school?

Very interested

Somewhat interested

Not interested

Undecided

Which of the following would increase the likelihood of your pursuit of a thesis? (Choose any that apply)

1. Publication opportunities
2. Assistantships
3. Interest in a particular professional topic

4. Interest in pursuing a PhD in the future
5. Nothing would increase the likelihood that I would pursue a thesis
6. Academic credit hours
7. Other: please specify

Which of the following would decrease the likelihood of your pursuit of a thesis? (Choose any that apply)

1. Lack of interest in research
2. Concern regarding ability to succeed/complete
3. Concern about time commitment
4. Not sure what a thesis entails
5. Other: please specify

How influential was the option to complete a thesis in your choice of graduate programs?

Very influential

Somewhat influential

Neutral

Not at all influential

How influential were your specific research interests in your choice of graduate programs?

Very influential

Somewhat influential

Neutral

Not at all influential

Do you plan to apply for a graduate research assistantship?

Yes or No

Which factor was the main motivation for applying for a graduate research assistantship?

1. Financial assistance
2. Interest in research
3. Other: please indicate

Are you interested in pursuing a PhD?

Very interested

Somewhat interested

Not interested

IUndecided

Please feel free to write additional comments.

Appendix B. Student comments

“While I think pursuing a PhD would be a great opportunity I do not think I would be able to afford to continue my education for that long.”

“The lack of knowledge I have about the graduate thesis has now made me nervous.”

“One thing that has hindered my interest in completing a thesis is because I am afraid that I will be unsuccessful in my research endeavors. That is the main reason behind my hesitation to complete. I am interested, however in completing my PhD in the future, which would require research. I believe future undergraduate students would benefit from education on completing a thesis or even a class that is dedicated to beginning a research project that has the potential for becoming a thesis project.”

“I am interested in obtaining a PhD but I don’t feel confident to make that decision yet because I feel like I’ve had so little opportunity to explore research for myself and truly know what kinds of opportunities are out there and how to get there.”

“Affordability issues.”

“An organized, well marketed program with accomplished faculty member who are willing to provide academic and career guidance is the most important thing to me.”

“If I could have information on what a thesis entails, that would be awesome.”

“I want to pursue a Master’s degree, but I still have 2 more years before I graduate, so I haven’t decided yet whether to do the exam or the research.”

“I am already enrolled in graduate school by technicality; I am in a 5 year program.”

“Personally, I am more interested in focusing on the clinical aspect of the field! I find it more rewarding to work with individuals and see their progress than to spend time on one specific research question or topic.”

“My results may be a little skewed. I attended (*university*) for a year before moving to (*state*) and I have been finishing my degree online. Because of that I have not been able to be as involved or aware of some of these opportunities.”

“I took a seminar that outlined research methods and importance of EBP. I loved this courses and it made me excited to write an honor thesis. My professor had us do a mock research project in order to expose us to the process, which was very helpful and influential to my decision to write an honors thesis and a master’s thesis. My professor also explained that both of these experiences in addition to my graduate clinical experience will point me in the right direction in terms of what type of career I would like to have. I would suggest, however, that student be exposed to the earlier in order to spark more interest in research and promote a deeper understanding of the important role that research plays in CSD.”