Undergraduate And Graduate Communication Sciences And Disorders Students’ Views: The Doctoral Pursuit

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Introduction

• Communication Sciences and Disorders (CSD): Audiologists (AuD) and Speech-Language Pathologists (SLP) (Mueller & Lisko, 2003)

• American Speech-Language-Hearing Association (ASHA) and Council of Academic Programs in Communication Sciences and Disorders (CAPCSD)
Problem Statement

• Shortage of CSD PhD faculty and SLPs and audiologists pursuing a PhD in CSD (McCrea, 2008; McNeil, 2013; Myotte, Hutchins, Cannizzaro, & Belin, 2011)

• Approximately a third of faculty openings in the field of CSD between 2012 and 2017 were remain unfilled (McNeil)
Problem Statement

• Undergraduate and graduate CSD research experience may promote PhD pursuits (Mueller & Lisko, 2003)

• ASHA and CAPCSD's goal

• Investigation into undergraduate and graduate CSD students' views
Purpose Statement

• The purpose of this research was to explore both undergraduate and graduate CSD students' views in order to grasp and provide recommendations to the PhD shortage.
Significance of the Study

• To better understand and offer recommendations to the PhD shortage
  • Advantageous on local and national platforms
  • CSD programs focus: increasing students' interest in pursuing a PhD (Ingham, Oller, & Wilcox, 2002; McCrea, 2008; McNeil, 2013)
Literature Review: The PhD Shortage

- Evidence of the PhD shortage (Ingham et al., 2002; McCrea, 2008; McNeil, 2013)

- The Bureau of Labor Statistics projected demand for both SLPs and audiologists (2016a, 2016b)

- Witter and Brackenbury (2014) noted possible negative consequences of PhD shortage
Research Question One

1. What are the reasons that undergraduate and graduate CSD students choose to pursue a PhD in CSD?
Research Question Two

2. What are the reasons that undergraduate and graduate CSD students do not pursue a PhD in CSD?
Research Question Three

3. What is the relationship between undergraduate and graduate CSD students' exposure to research and their views regarding the pursuit of a PhD in CSD?
Research Design

- Quantitative survey design (Gay, Mills, & Airasian, 2012)
  - Descriptive & correlational components
- Portions of the Madison, Guy, & Koch (2004) survey tool were administered
- Portions of the Witter and Brackenbury (2014) survey tool were administered
Participants

• Undergraduate and graduate CSD students from 12 accredited Midwestern CSD university programs

• 100 CSD students
  • 49 undergraduate; 51 graduate
Methodology: Research Question One & Two

• What are the reasons that undergraduate and graduate CSD students choose to pursue a PhD in CSD?

• What are the reasons that undergraduate and graduate CSD students do not pursue a PhD in CSD?

• Portions of the Madison et al. (2004) survey tool were administered

• Example survey question:
  • Please rank the following eight designated statements as to why CSD professionals do choose to pursue a PhD in order of importance. (1= most important reason one would pursue a PhD, 2= next important, etc.)
    (Research interest, prestige, interest in higher education etc.)

• Analytical methods: mode and median

• Nonparametric Friedman’s test with a series of post-hoc Wilcoxon signed-rank tests
Methodology: Research Question Three

- What is the relationship between undergraduate and graduate CSD students' exposure to research and their views regarding the pursuit of a PhD in CSD?

- Portions of the Witter and Brackenbury (2014) survey tool were administered

- Analytical methods:
  - Predictor: CSD students' exposure to research (Cronbach’s alpha .76)
  - Predictor: CSD students' interest in research (Cronbach’s alpha .88)
  - Covariate predictors: age
  - Outcome variable: CSD students' views in regard to the pursuit of a PhD (Cronbach’s alpha .92)

- Multiple regression
Findings: Research Question One: What are the reasons that undergraduate and graduate CSD students choose to pursue a PhD in CSD?

Table 1

<table>
<thead>
<tr>
<th>Reason</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research interest</td>
<td>3.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Desire for knowledge</td>
<td>3.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Make contribution to the discipline</td>
<td>4.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Future salary possibilities</td>
<td>5.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Interest in higher education</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Desire to teach in a university setting</td>
<td>4.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Prestige and title</td>
<td>6.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Interest in working with particular scholar</td>
<td>7.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>
Findings: Research Question One: What are the reasons that undergraduate and graduate CSD students choose to pursue a PhD in CSD?

- Friedman’s test, $\chi^2 (7) = 114.77, p < .001$
- A Wilcoxon signed-rank:
- Prestige and title were statistically significantly lower than research interest $z = -4.419, p < .05$, interest in higher education $z = -3.514, p < .05$, and desire for knowledge $z = -4.700, p < .05$
Findings: Research Question Two: What are the reasons that undergraduate and graduate CSD students do not pursue a PhD in CSD?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Median</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of doctoral program</td>
<td>2.50</td>
<td>1.00</td>
</tr>
<tr>
<td>Satisfaction with current degree &amp; position</td>
<td>4.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lack of research interest</td>
<td>5.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Length of doctoral program</td>
<td>3.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Criteria for getting accepted</td>
<td>5.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Lack of interest in teaching</td>
<td>6.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Lack of interest in working in higher education</td>
<td>6.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Distance &amp; location of PhD programs</td>
<td>6.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>
Findings: Research Question Two: What are the reasons that undergraduate and graduate CSD students do not pursue a PhD in CSD?

- Friedman’s test, $\chi^2 (7) = 93.423, p < .001$

- Wilcoxon signed-rank:

  - Lack of interest in working in higher education was statistically significantly lower than lack of research interest $-3.833, z = -, p < .05$, satisfaction with current degree and position $z = -4.04, p < .05$, cost of doctoral program $z = -6.201, p < .05$, and length of doctoral program $z = -4.646, p < .05$
Findings: Research Question Three: What is the relationship between undergraduate and graduate CSD students' exposure to research and their views regarding the pursuit of a PhD in CSD?

- $F(3, 91) = 21.14, p < .05, R^2 = .41$

Predictors investigated:
- Significant:
  - Interest in CSD Research: $\beta = .63, t(91) = 7.81, p < .05$
- Insignificant:
  - Exposure in CSD Research: $\beta = -.04, t(91) = -.45, p > .05$
  - Age: $\beta = .02, t(91) = .18, p > .05$
Findings: Research Question Three: What is the relationship between undergraduate and graduate CSD students' exposure to research and their views regarding the pursuit of a PhD in CSD?

Figure 1. Relationship Between Students' Interest in Research and Views Regarding the Pursuit of a PhD
Conclusions

- Research interest, desire for knowledge, & making a contribution to the discipline appear to be more important reasons why CSD students would pursue a PhD (Davidson, Ellis Weismer, Alt, & Hogan, 2013; Madison et al., 2004)

- Lack of research interest and length of a doctoral program appear to be more important reasons why CSD students would not pursue a PhD (Davidson et al.; Madison et al.)

- Positive relationship between CSD students' interest in research and their views regarding the pursuit of a PhD (Mueller & Lisko, 2003)
Implications

• Support the need for future investigation into the relationship between students' exposure and interest in research and their views regarding the pursuit of a PhD

• Recruitment target: interest in research
Limitations

• Sample size
• Survey tool & closed-ended questions
• Sensitivity of survey tool: exposure to research
Recommendations

- Increase sample size
- Survey tool & open-ended questions
- Comprehensive survey tool: research experiences
- Survey CSD programs: promote research
- CSD students’ knowledge regarding PhD
References


References


References

McNeil, M. R. (2013). *Strategic Plan to Increase the Student Pipeline and Workforce for PhD Researchers and Faculty Researchers*.


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