

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

Reasons Why CSD Students Choose to Pursue a PhD in CSD

<i>Reason</i>	<i>Median</i>	<i>Mode</i>
Research interest	3.00	1.00
Desire for knowledge	3.00	1.00
Make contribution to the discipline	4.00	1.00
Future salary possibilities	5.00	2.00
Interest in higher education	4.00	4.00
Desire to teach in a university setting	4.00	6.00
Prestige and title	6.00	7.00
Interest in working with particular scholar	7.00	8.00

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 2

Reasons Why CSD Students Choose Not to Pursue a PhD in CSD

Reason	<i>Median</i>	<i>Mode</i>
Cost of doctoral program	2.50	1.00
Satisfaction with current degree & position	4.00	1.00
Lack of research interest	5.00	1.00
Length of doctoral program	3.00	2.00
Criteria for getting accepted	5.00	3.00
Lack of interest in teaching	6.00	6.00
Lack of interest in working in higher education	6.00	7.00
Distance & location of PhD programs	6.00	8.00

Findings: Research Question Two: What are the reasons that undergraduate and graduate CSD students do not pursue a PhD in CSD?

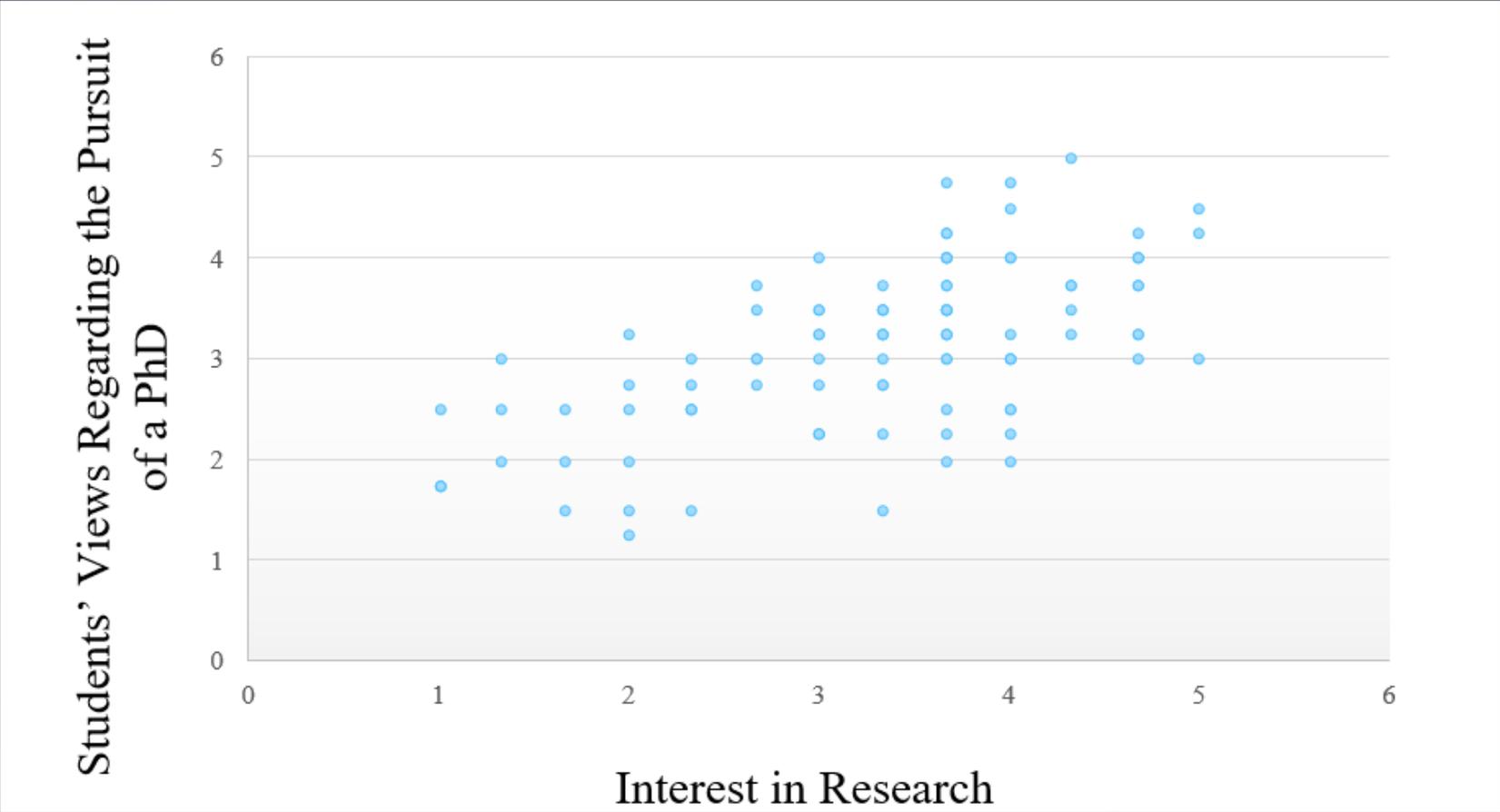
- Friedman's test, $\chi^2 (7) = 93.423, p < .001$
- Wilcoxon signed-rank :
- Lack of interest in working in higher education was statistically significantly lower than lack of research interest $-3.833 z = -, p < .05$, satisfaction with current degree and position $z = -4.04, p < .05$, cost of doctoral 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

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