Adoption, Diffusion, and Implications of Innovative Nursing Dissertation Models

Janessa M. Graves, PhD MPH
Assistant Professor
WSU College of Nursing

AACN Doctoral Nursing Conference
January 17-19, 2019

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WASHINGTON STATE UNIVERSITY

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Study Team

- Janessa M. Graves, PhD MPH
  - Assistant Professor
  - Assistant Dean for Undergraduate and Community Research
- Electra Enslow, MA AHIP
  - Head of Library Research and Instruction
- Kyle W. Ross, EdD(c)
  - Nursing Academic Coordinator and Advisor

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Presentation outline

- Dissertation models
  - Traditional vs. Alternative
  - Advantages vs. Disadvantages
- Current practices in nursing PhD programs
- Effectiveness of alternative models in improving dissemination
  - Study 1
  - Study 2
- Next Steps
- Conclusions

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Studies 1 and 2

Study 1

- How do U.S. nursing doctoral programs approach alternative manuscript formats?

Study 2

- How effective are alternative manuscript formats for nursing doctoral students?

Background

- In 2010, <1% of nurses held a doctorate degree in nursing or a nursing-related field[1]
- The Future of Nursing Recommendation:
  - "Double the Number of Nurses with a Doctorate by 2020"[1]
- Major initiatives to increase doctorally prepared nurses
  - Jonas Center for Nursing and Veterans Healthcare
  - Rita & Alex Hillman Foundation
  - RWJF

[1] Institute of Medicine. 2011. The future of nursing: Leading change, advancing health. Washington, DC: The National Academies Press.

[2] National Academies of Sciences, Engineering, and Medicine. 2016. Assessing Progress on the Institute of Medicine Report The Future of Nursing. Washington, DC: The National Academies Press. https://www.nap.edu/read/21838/chapter/5#86

The Dissertation

- Culmination of PhD education
- Exhaustive scholarly research
- Basis of academic resume
- Demonstrates professional proficiency in research

Traditional Dissertation Format

- Multiple chapters unified as a <u>single document</u>
  - Introduction
  - Literature review
  - Methods
  - Results
  - Conclusions
- Most common format in nursing and other disciplines

Alternative Dissertation Formats

According to one of those often-quoted statistics that should be true but probably isn't, the average number of people who read a PhD thesis all the way through is 1.6. And that includes the author.[1]

- Mean number of pages of a thesis/dissertation increased from ~100 in the 1950s to ~200 currently – ProQuest[2]
- Recommendations have been made to "reimagine the dissertation" in many disciplines
- Examples of alternative formats[3]:
  - Multiple(3)-paper dissertation with distinct yet cohesive manuscripts suitable for publication in scholarly journals
  - Lengthy one-paper manuscript
  - Novel
  - Portfolio

[1] The past, present and future of the PhD thesis. *Nature*. 2016, vol. 535, nº 7610, pp. 7-7. DOI: 10.1038/535007a
[2] Gold, J. What's the point of the PhD thesis? Nature. 2016, vol. 535, nº 7610, pp. 26-28. DOI: 10.1038/535026a
[3] Watson, D. L., & Nehls, K. (2016). Alternative dissertation formats: Preparing scholars for the academy and beyond. In *Contemporary Approaches to Dissertation Development and Research Methods* (pp. 43-52). IGI Global.

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"Manuscript Option" Dissertation Format

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"Manuscript Option" Dissertation Format

Traditional Format	Manuscript Option Format
I. 5-6 chapters; Intodroduction/significance/scope II. Review of literature III. Methods (design, sample, measures, analytic strategy) IV. Findings V. Discussion and Recommendations	I. 5 "chapters"; Introduction and overview of topic and three papers II. Review of literature; systematic review; theoretical framework III. One data-based manuscript IV. Two data-based manuscripts V. Discussion and Recommendations

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Broome, M. (2018). The Manuscript Option Dissertation: Dissemination and Challenges. *Nurse Author & Editor*, *28*(1), 1.
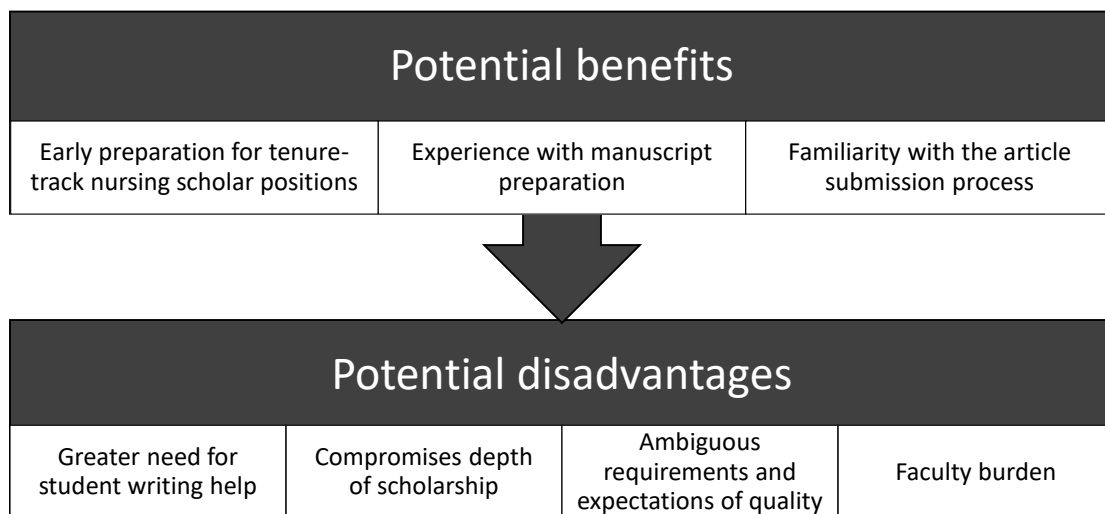
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Table 2. Example of Three Option Manuscripts in Nursing Science

PhD Nursing Science (Indiana University)	PhD in Nursing with Informatics Concentration (Blekinge Institute of Technology, Sweden)	
Giambra, B. K., Sabourin, T., Broome, M. E., & Buelow, J. (2014): The theory of shared communication: How parents of technology dependent children communicate with nurses on the inpatient unit. *Journal of Pediatric Nursing*, 29(1), 14-22. PMID: 23583360	Georgsson, M., & Staggers, N. (2016). Quantifying usability: an evaluation of a diabetes mHealth system on effectiveness, efficiency, and satisfaction metrics with associated user characteristics. *Journal of the American Medical Informatics Association: JAMIA*, 23(1), 5–11. https://doi.org/10.1093/jamia/ocv099	
Giambra, B. K., Stiffler, D., & Broome, M. E. (2014). An integrative review of communication between parents and nurses of hospitalized technology-dependent children. *Worldviews on Evidence-Based Nursing*, 11(6), 369-375. PMID: 25230724	Georgsson, M., & Staggers, N. (2016). An evaluation of patients' experienced usability of a diabetes mHealth system using a multi-method approach. *Journal of Biomedical Informatics*, 59, 115–129. https://doi.org/10.1016/j.jbi.2015.11.008.	Georgsson, M., & Staggers, N. (2016). Heuristic evaluation of an mHealth diabetes self-management system using disease specific patient profiles. *Studies in Health Technology and Informatics*, 225, 530–534. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/27332257
Giambra, B., Broome, M.E., Sabourin, T., Buelow, J.M., & Stiffler, D. (2017). Integration of Parent and Nurse Perspectives of Communication to Plan Care for Technology Dependent Children: The Theory of Shared Communication. *Journal of Pediatric Nursing*. PMID: 28169035, DOI: 10.1016/j.pedn.2017.01.014	Georgsson, M., Staggers, N., & Weir, C. (2016). A Modified user-oriented heuristic evaluation of a mobile health system for diabetes self-management Support. *Computers, Informatics, Nursing: CIN*, 34(2), 77–84. https://doi.org/10.1097/CIN.0000000000000209.	Georgsson, M., & Staggers, N. (2016). A practical method for data handling in multi-method usability research studies. *Studies in Health Technology and Informatics*, 228, 302–306. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/27577392.

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Broome, M. (2018). *Nurse Author & Editor*, *28*(1), 1.

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"Manuscript Option" Dissertation Format

- First paper
  - Theoretical framework, if original
  - Concept analysis
  - Systematic review
  - Methodology
  - The protocol for a clinical trial
  - Pilot study findings
- Other papers
  - Data-based study findings

- Caveats
  - "Publishable quality"
  - Published at defense vs. not
  - Authorship
  - Revisions
- Challenges
  - Copyright
  - Salami slicing

Broome, M. (2018). The Manuscript Option Dissertation: Dissemination and Challenges. *Nurse Author & Editor*, *28*(1), 1.

Benefits/challenges of the manuscript option

Potential benefits		
Early preparation for tenure-track nursing scholar positions	Experience with manuscript preparation	Familiarity with the article submission process

Potential disadvantages			
Greater need for student writing help	Compromises depth of scholarship	Ambiguous requirements and expectations of quality	Faculty burden

Role delineation for faculty & student

Study 1

How do U.S. nursing doctoral programs approach alternative manuscript formats?

Graves JM, Kehoe L, Postma J, Katz J, Swalling E, Barbosa-Leiker C. Alternative dissertation formats in nursing education: Results from a national survey. *J Nurs Scholarship*. 2018;50:3:1-10.
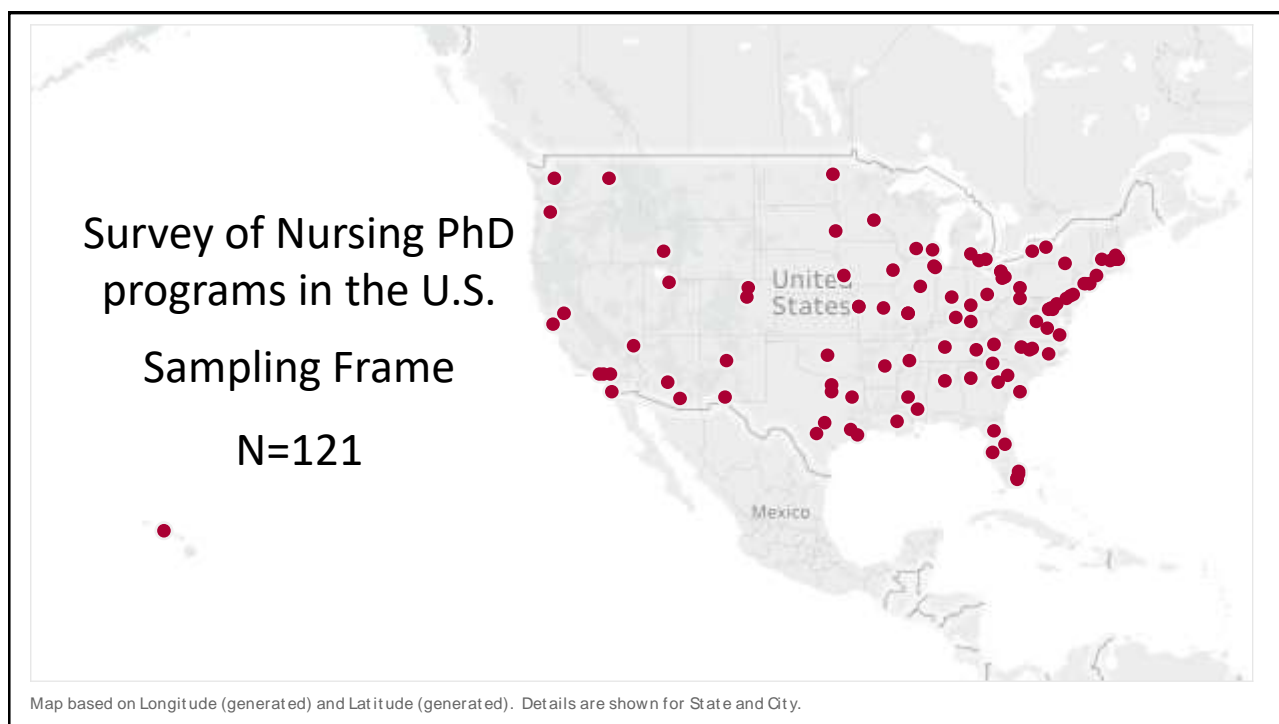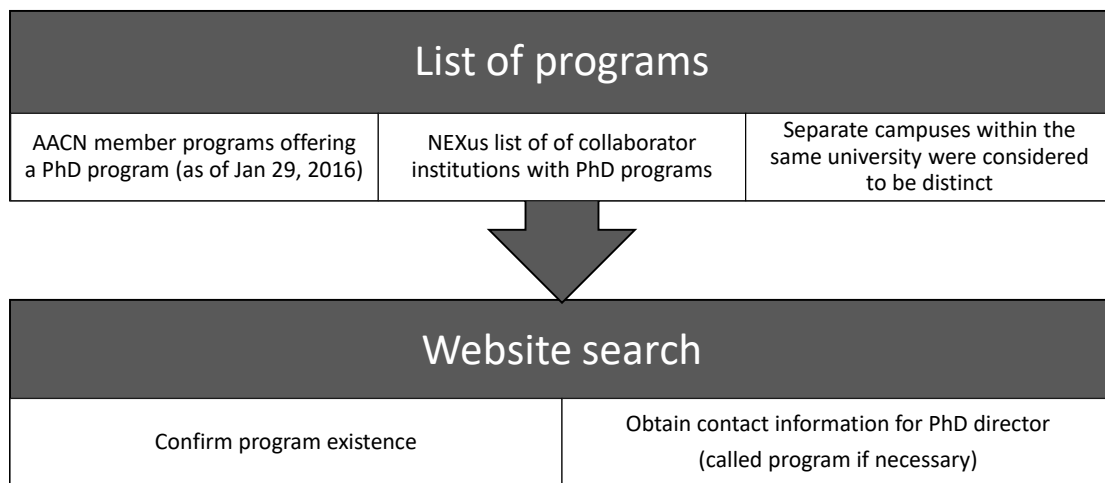
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Study 1 Objective

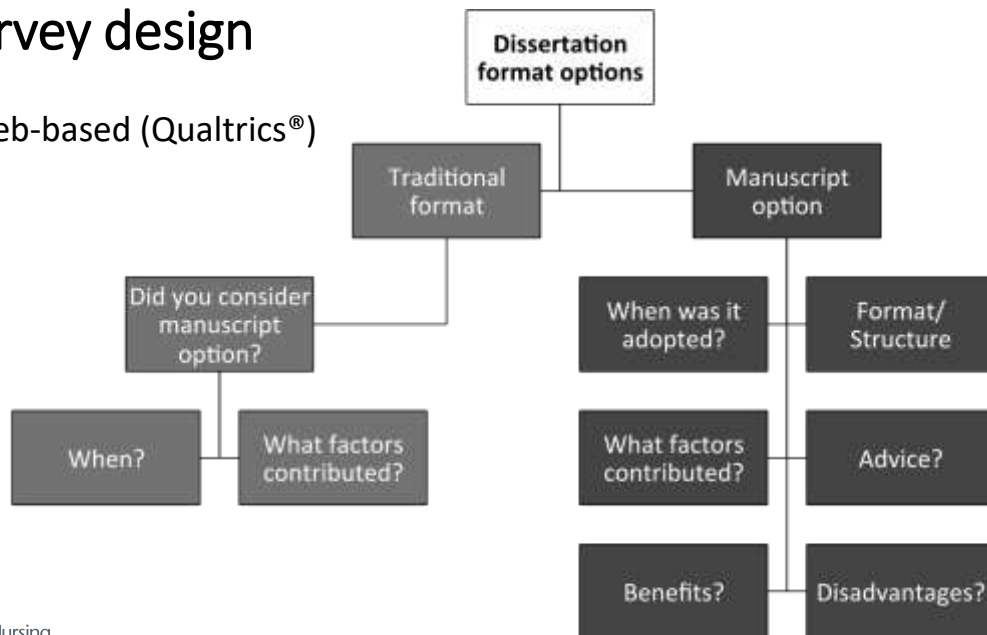Explore the use of the manuscript option format by U.S. doctoral programs

1. Proportion of programs employing each dissertation format
2. Details about manuscript option
3. Factors contributing to adopting (or not adopting) the alternative

Survey Sampling and Administration

List of programs		
AACN member programs offering a PhD program (as of Jan 29, 2016)	NEXus list of of collaborator institutions with PhD programs	Separate campuses within the same university were considered to be distinct

Website search	
Confirm program existence	Obtain contact information for PhD director (called program if necessary)

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Survey of Nursing PhD programs in the U.S.

Sampling Frame

N=121

Map based on Longitude (generated) and Latitude (generated). Details are shown for State and City.

Survey design

- Web-based (Qualtrics®)

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Study 1 outcomes

Quantitative outcome measures

- Types of dissertation formats
- Factors contributing to adoption (or not)

Qualitative outcomes of interest

- Factors contributing to adoption (or not)
- Advantages/disadvantages
- Factors/issues for programs to consider
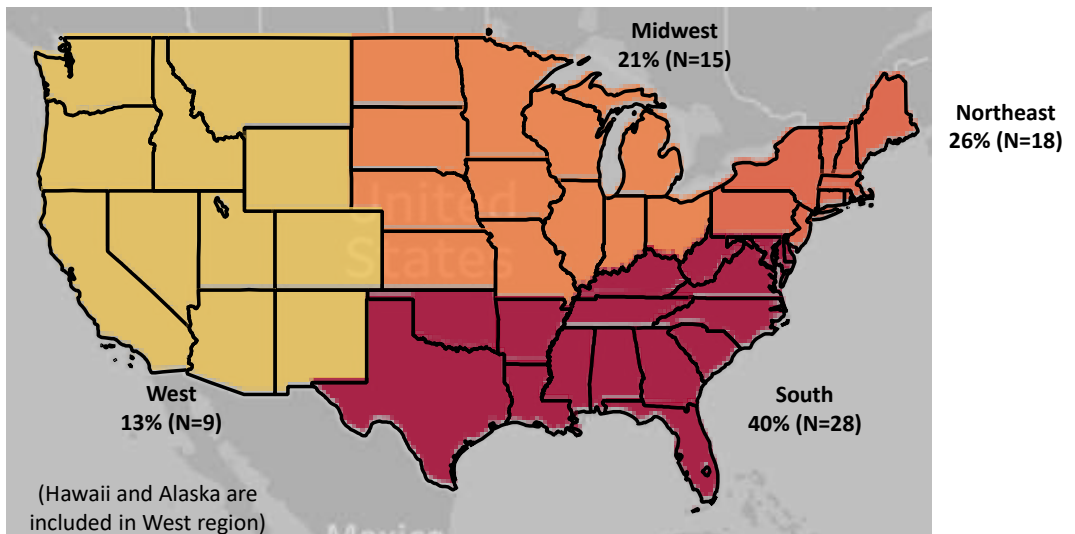- Advice

Analysis

Quantitative analysis

- Inductive content analysis with a qualitative descriptive approach
  - Preliminary thematic categories & coded text
  - Iterative development of themes
  - Identification of exemplar quotes

Quantitative analysis

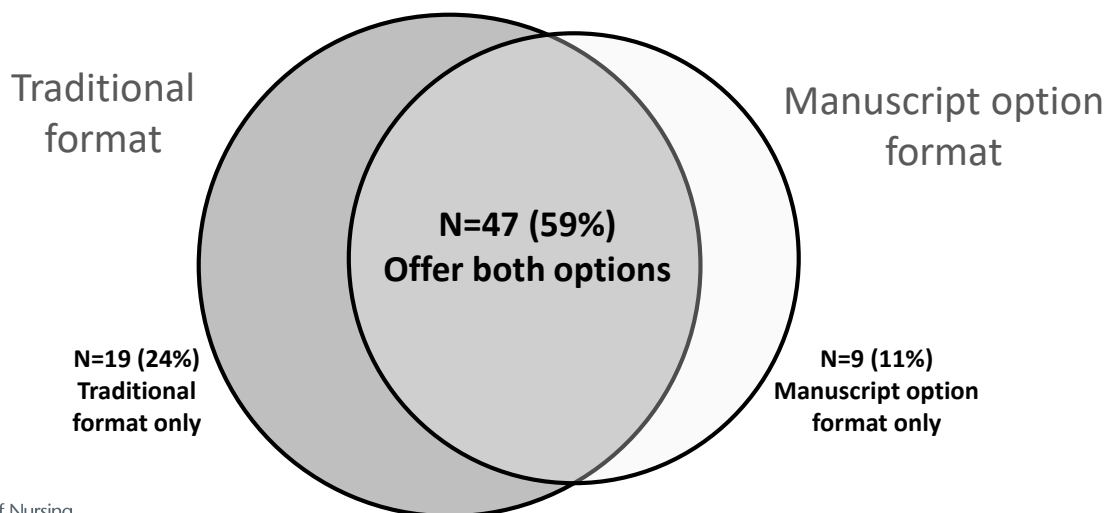- Descriptive statistics

Respondent locations

Midwest 21% (N=15)

Northeast 26% (N=18)

West 13% (N=9)

South 40% (N=28)

(Hawaii and Alaska are included in West region)

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When was the first entering PhD class?
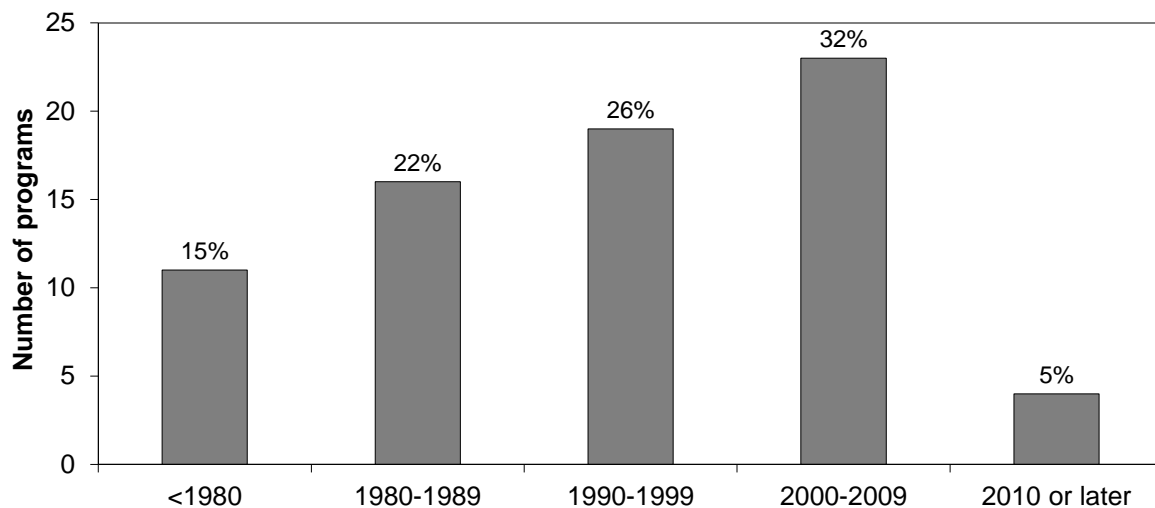
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Dissertation formats offered

Traditional format

Manuscript option format

N=47 (59%)
Offer both options

N=19 (24%)
Traditional
format only

N=9 (11%)
Manuscript option
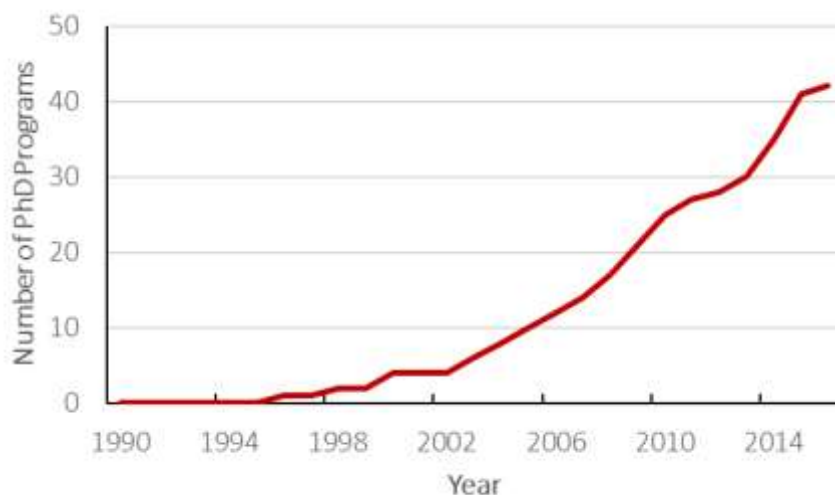**format only**

No response (N=4)

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Year manuscript option was adopted

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Note: Responses are only from programs that offer the manuscript option and responded to this question.

Why <u>not</u> adopt?

- Half of the schools with "Traditional" format dissertations only reported having considered the Manuscript Option in the past

- Factors playing a role in decision <u>not</u> to adopt (not mutually exclusive):

  - Lack of PhD program faculty support for the manuscript option (33%)
  - Challenge(s) with University/College regarding issues such as copyrights (22%)
  - Perception that alternative dissertations (such as the manuscript option) are less rigorous than traditional formats (22%)
  - Concern(s) about ambiguous requirements for manuscript option dissertations
  - Concern(s) about quality (22%)
  - Not all dissertations are suitable for manuscript option format (22%)

College of Nursing Note: Responses are only from programs that considered but did not offer the manuscript option. Respondents could choose from categorical factors (may choose more than one).

Why <u>not</u> adopt? (Qualitative text)

- Editor fatigue
- External factor(s) (e.g., other university programs)
- Time (concerns about program progression)
- Unclear policies and procedures
- Faculty educational philosophy
- Limits depth in topic
- Few publication opportunities

"Concern for quality of manuscripts submitted for publication and 'flooding' journals with manuscripts that burden editors and reviewers"

"Watered down the process"

Note: Responses are only from programs that considered but chose to not offer the manuscript option. Open-ended question.

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Why adopt?

Considerations that lead to offering the manuscript option

- PhD program faculty supported the manuscript option (90%)
- Potential to increase the transition of student nurse scholars to academic positions (86%)
- Students gain firsthand experience in publishing (84%)
- Better prepare students for a career in academia (78%)
- Increased competitiveness when searching for future jobs ("jump start") (68%)

Note: Responses are only from programs that offer the manuscript option. Respondents could choose from categorical factors (may choose more than one). Only responses endorsed by >50% of respondents are listed here.
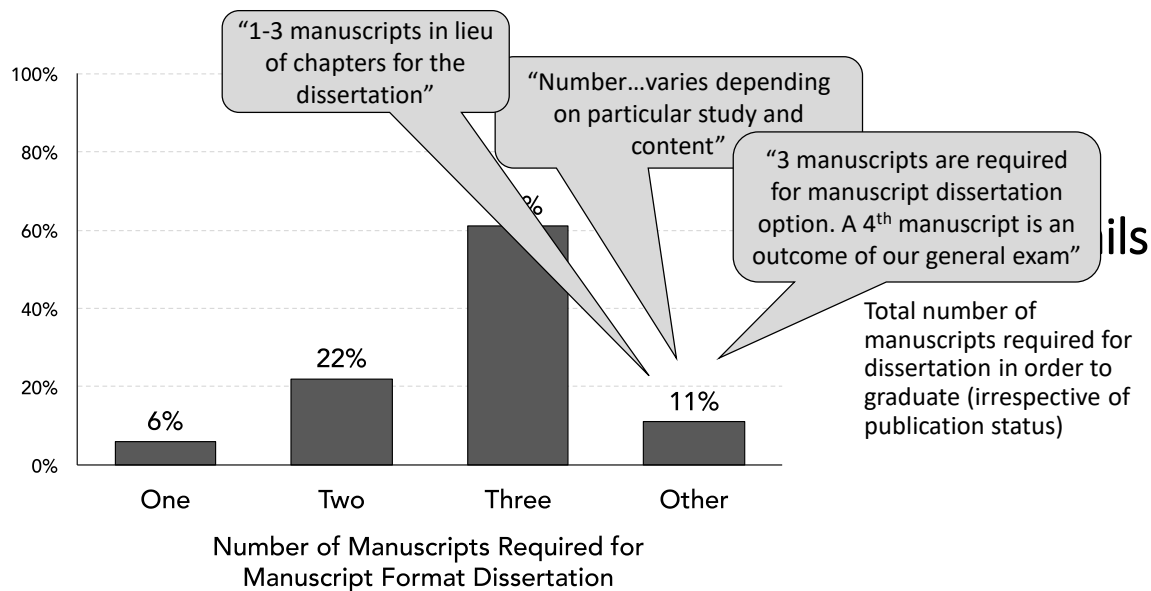
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Why adopt? (Qualitative text)

- Generate publications for the graduate student
- Learn the publication process
- External factors (e.g., support for the option through the graduate school)
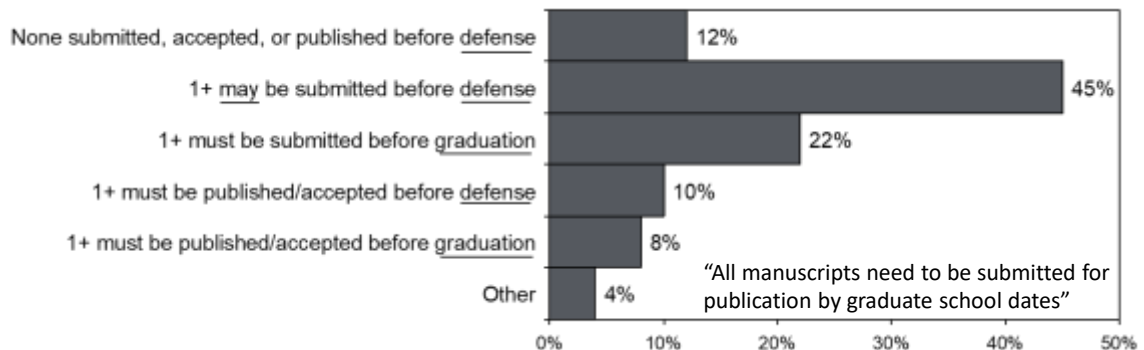- Time (for faculty and student)

> "Graduates may fail to publish manuscripts from their traditional format dissertation for a variety of reasons including lack of time after assuming a full time paid position and lack of appropriate mentoring."
>
> "Being allowed/encouraged to write manuscripts while still a student was thought to increase their scholarly productivity while being effectively mentored."

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Note: Responses are only from programs that offer the manuscript option. Open-ended question.

"1-3 manuscripts in lieu of chapters for the dissertation"

"Number…varies depending on particular study and content"

"3 manuscripts are required for manuscript dissertation option. A 4th manuscript is an outcome of our general exam"

Total number of manuscripts required for dissertation in order to graduate (irrespective of publication status)

One — 6%
Two — 22%
Three
Other — 11%

Number of Manuscripts Required for Manuscript Format Dissertation

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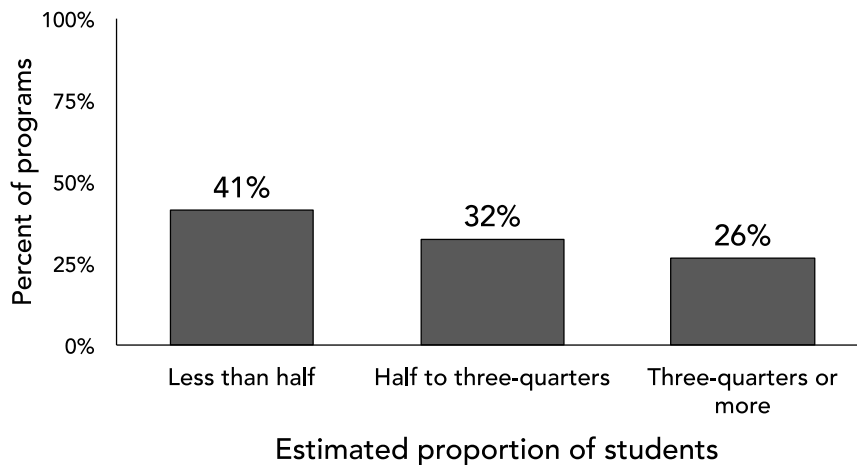
Manuscript option details

- Policies regarding submission of dissertation manuscripts to journals
  - Most institutions noted that 1+ manuscripts <u>may</u> be submitted before defense

Category	Percent
None submitted, accepted, or published before <u>defense</u>	12%
1+ <u>may</u> be submitted before <u>defense</u>	45%
1+ must be submitted before <u>graduation</u>	22%
1+ must be published/accepted before <u>defense</u>	10%
1+ must be published/accepted before <u>graduation</u>	8%
Other	4%

"All manuscripts need to be submitted for publication by graduate school dates"

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<u>Note</u>: Responses are only from programs that offer the manuscript option.

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Manuscript option details

- How popular is the manuscript option among students?

Percent of programs

Estimated proportion of students	Percent
Less than half	41%
Half to three-quarters	32%
Three-quarters or more	26%

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<u>Note</u>: Responses are only from programs that offer the manuscript option *and* traditional format (N=34). Question was open-ended and coded. Eight (N=8) programs provided lengthier text responses/explanations not summarized here.

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Manuscript option advantages

- Generate publications for the student, faculty, and/or external members
- Recruitment to the PhD program
- Learn the publication process
- Strengthen the expectation for publications
- Committee/faculty engagement

> "The biggest one is that they publish their dissertation sooner"

> "Encouraging scholarly productivity expectations of our graduates."

> "A potential thank you to external members who, if they meet the guidelines, will be a co-author"

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Note: Responses are only from programs that offer the manuscript option *and* traditional format. Open-ended question.

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Manuscript option <u>dis</u>advantages

- Formatting (e.g., complying with graduate school guidelines)
- Limits depth in topic
- Faculty resistance (time/workload)
- Academic ownership/copyright
- Student writing skills (incl. ESL)

- Lack of faculty preparedness
- Time to publication & student progression
- Addressing conflicts between committees and reviewers
- Negotiating co-authorship

> "Writing for narrow purposes may limit in-depth exploration"

> "Might take longer if a student has difficulty getting a manuscript accepted"

> "Lack of experience among faculty with this approach"

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Note: Responses are only from programs that offer the manuscript option *and* traditional format. Open-ended question.

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Advice from respondents

Student admissions	• Match dissertation format to student needs/background • Preparation for future nursing scholars
Writing support	• Needed for students and faculty
Faculty experience	• Own program of research • Workload may be greater for manuscript option
Clear policies & procedures	• Detailed, specific expectations and requirements
Warnings	• Institutional readiness • Workload for faculty

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<u>Note</u>: Responses are only from programs offer the manuscript option. Open-ended question.

Study 1 Conclusions

Manuscript format dissertations
- Commonly offered
- Results in publications
- Contributes to nursing scholarship
- Prepares future nurse scholars
- Challenges may arise in implementation

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Yet questions lingered...

Manuscript option advantages

- Generate publications for the student, faculty, and/or external members
- Recruitment to the PhD program
- Learn the publication process
- Strengthen the expectation for publications
- Committee/faculty engagement

"The biggest one is that they publish their dissertation sooner"

"Encouraging scholarly productivity expectations of our graduates."

"A potential thank you to external members who, if they meet the guidelines, will be a co-author"

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Note: Responses are only from programs that offer the manuscript option and traditional format. Open-ended question.

How effective are alternative manuscript formats for nursing doctoral students?

Compared to the traditional format, do students who chose the manuscript format….
…publish their dissertation-related research sooner?
…generate more publications?
…have greater "scholarly productivity"?

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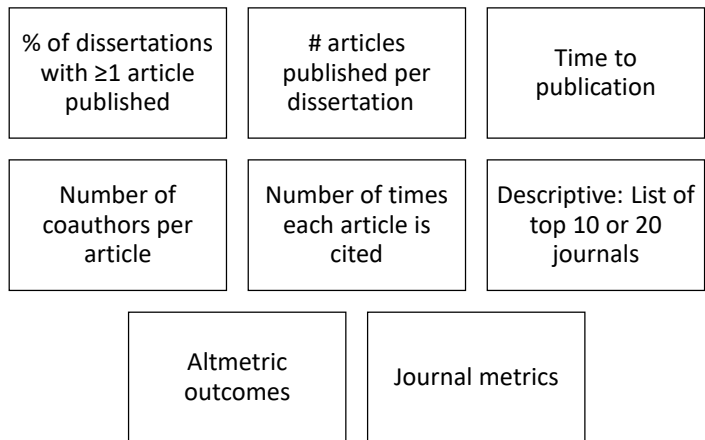

How effective are alternative manuscript formats for nursing doctoral students?

Compared to the traditional format, do students who chose the manuscript format….
…publish their dissertation-related research sooner?
…generate more publications?
…have greater "scholarly productivity"?

Where are they publishing?

Do they have more coauthors? Fewer?

Are the articles cited more often?

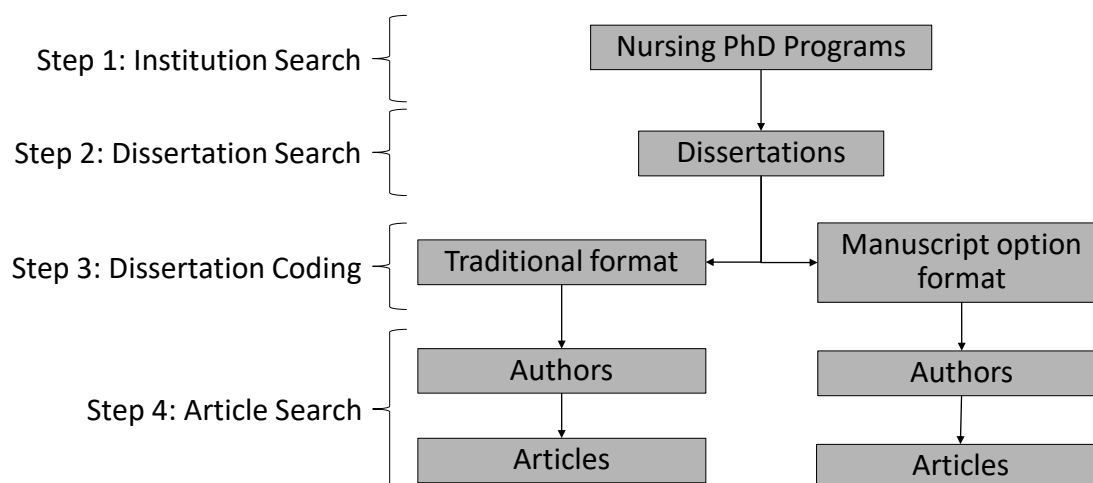*Do their altmetrics differ?*

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Study 2 outcomes

% of dissertations with ≥1 article published	# articles published per dissertation	Time to publication
Number of coauthors per article	Number of times each article is cited	Descriptive: List of top 10 or 20 journals
	Altmetric outcomes	Journal metrics

Study 2 Design

Nursing PhD Programs → Dissertations → Traditional format / Manuscript option format → Authors → Articles
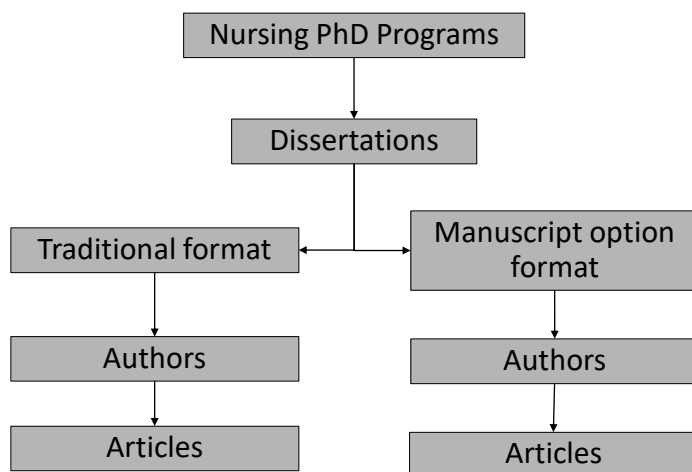
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Study 2 Design

Step 1: Institution Search

Step 2: Dissertation Search

Step 3: Dissertation Coding

Step 4: Article Search

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                    ┌─────────────────────────┐
                    │   Nursing PhD Programs   │
                    └─────────────────────────┘
                                 │
                                 ▼
                    ┌─────────────────────────┐
                    │      Dissertations       │
                    └─────────────────────────┘
                                 │
          ┌──────────────────────┴──────────────────────┐
          ▼                                              ▼
 ┌──────────────────┐                      ┌──────────────────────────┐
 │ Traditional format│◄────────────────────│  Manuscript option format │
 └──────────────────┘                      └──────────────────────────┘
          │                                              │
          ▼                                              ▼
 ┌──────────────────┐                      ┌──────────────────────────┐
 │     Authors      │                      │         Authors          │
 └──────────────────┘                      └──────────────────────────┘
          │                                              │
          ▼                                              ▼
 ┌──────────────────┐                      ┌──────────────────────────┐
 │     Articles     │                      │         Articles         │
 └──────────────────┘                      └──────────────────────────┘
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Step 1: Institution Search

- Inclusion criteria
  - Schools/Colleges of Nursing
  - Located in the U.S.
  - Offer traditional & manuscript option dissertations
  - Date of adoption of manuscript option ≤ 2010

Step 2: Dissertation Search

- ProQuest Dissertations & Theses Database (PQDT)
- Search from date of offering manuscript dissertation format option
- Search terms:
  - College/School of Nursing name (anywhere)
  - University name (exact, in school field)
- Additional limits: Dates, Manuscript type

Example

> Search terms - (College of Nursing) AND sch.Exact("Washington State University")
> Additional limits - Date: After 2019 December 31; Manuscript type: Doctoral dissertations

- Review for eligibility
  - Discipline
  - Degree type

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Step 3: Dissertation Coding

> This overview of the dissertation will present (a) a discussion of the changes made from the research proposal, (b) an overview of the three papers that were written for partial completion of the final dissertation, (c) a report of the research findings that were not included in the three papers as well as a discussion of the reasons for exclusion of the findings, and (d) a brief discussion for two manuscripts to be written post-dissertation based on the findings from this research study. Following this introductory section, there are four additional sections that constitute the final dissertation to be submitted to the
>
> 4
>
> dissertation committee: (a) the dissertation proposal approved by the committee in September 2009, (b) manuscript number one, (c) second paper, (d) final paper reporting the results.

Step 4: Article Search

- PubMed, CINAHL, PychInfo, Google Scholar

- Author search
  - For very common names (e.g., Jennifer Smith), restrict search to nursing journals only (PubMed)
- Year restriction (1 year prior to dissertation defense and forward)

- Export
  - Endnote
  - Excel

Analysis

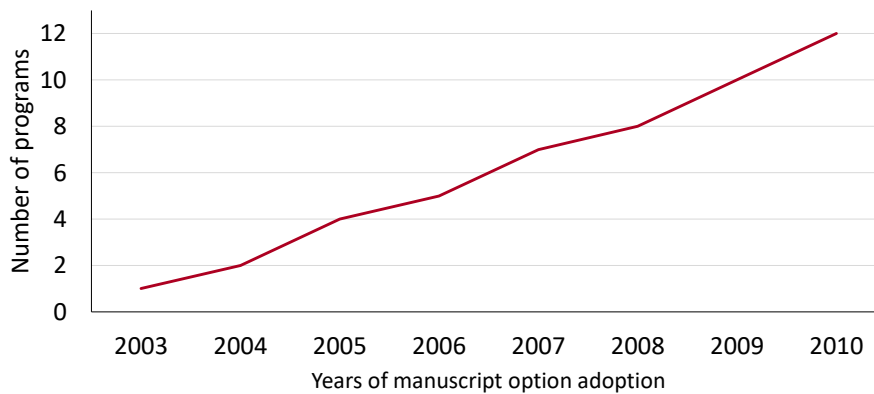- Descriptive statistics
- Manuscript option vs. traditional format

Chi-squared/
Fisher's Exact tests
Relative risk
regression

T-tests
Count models
Survival analysis

% of dissertations with ≥1 article published	# articles published per dissertation	Time to publication
Number of coauthors per article	Number of times each article is cited	Descriptive: List of top 10 or 20 journals
	Altmetric outcomes	Journal metrics

Descriptive Statistics

Clustering: By institution, dissertation

Study 2 Findings

- N=12 Nursing PhD programs met inclusion criteria
  - Evenly dispersed geographically

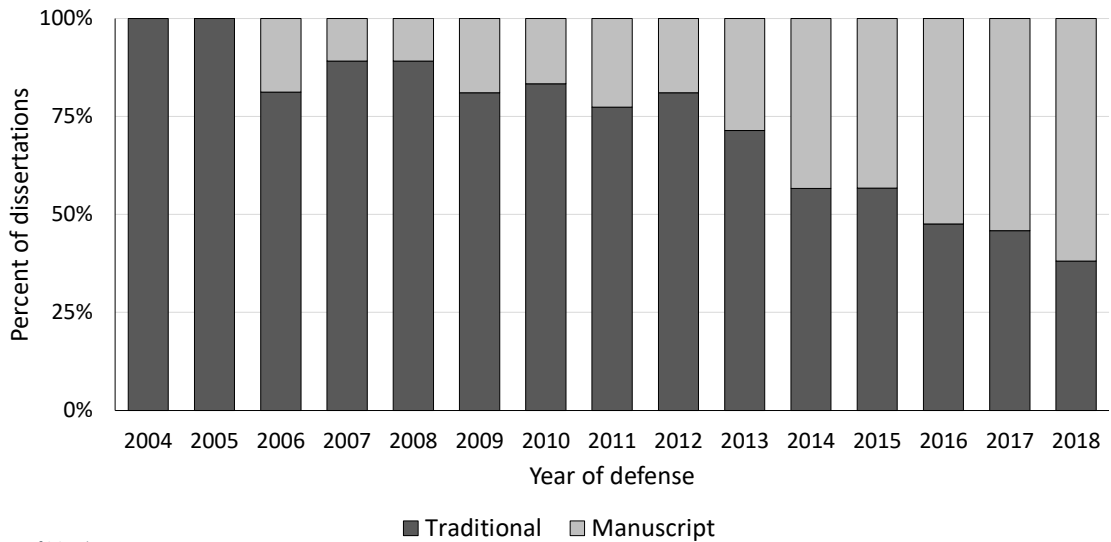

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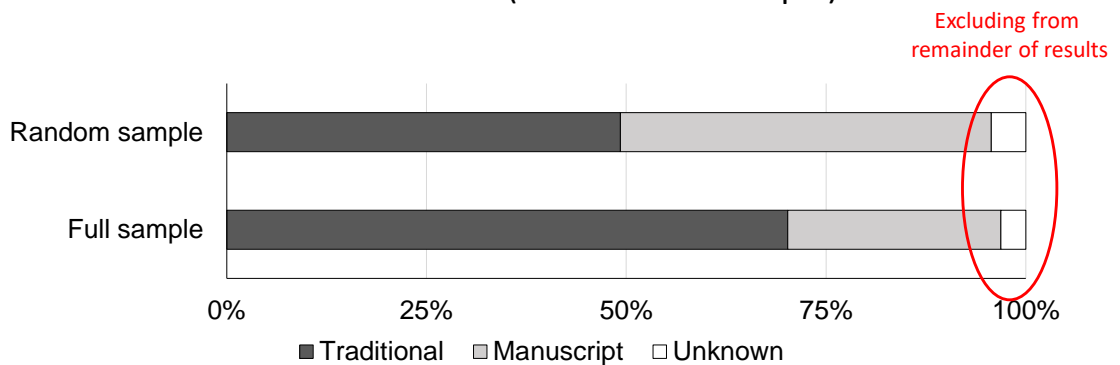# Study 2 Findings: Dissertation search & coding

```
        Initially identified
             N=599
```

Excluded

Non-Nursing N=109
Non-PhD N=64
Incorrect dates N=6
Repeat N=1
Unknown affiliation N=3

Restrictions &
Embargoes

N=416

	Traditional format N=292	**Manuscript format** N=111	**Unknown/TBD** N=13
Mean number of dissertations per program [SD]:	9.3 [8.0]	24.3 [23.2]	1.1 [2.0]
Median:	7	19	0
Range:	1-30	2-78	0-5
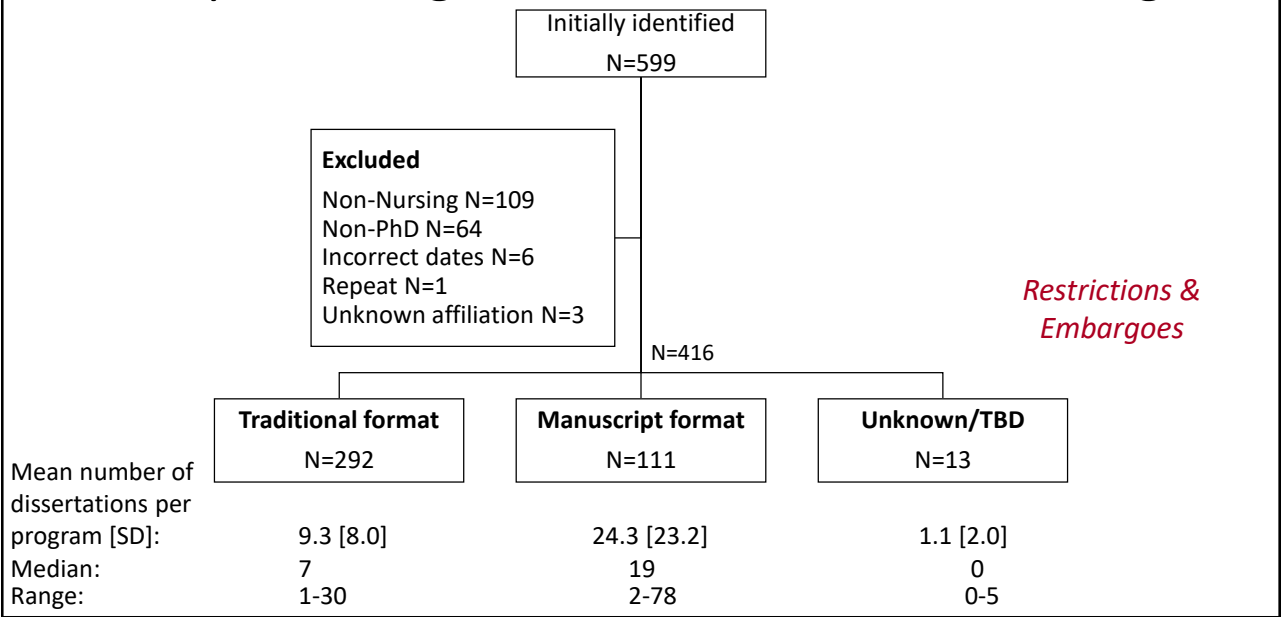
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Study 2 Findings

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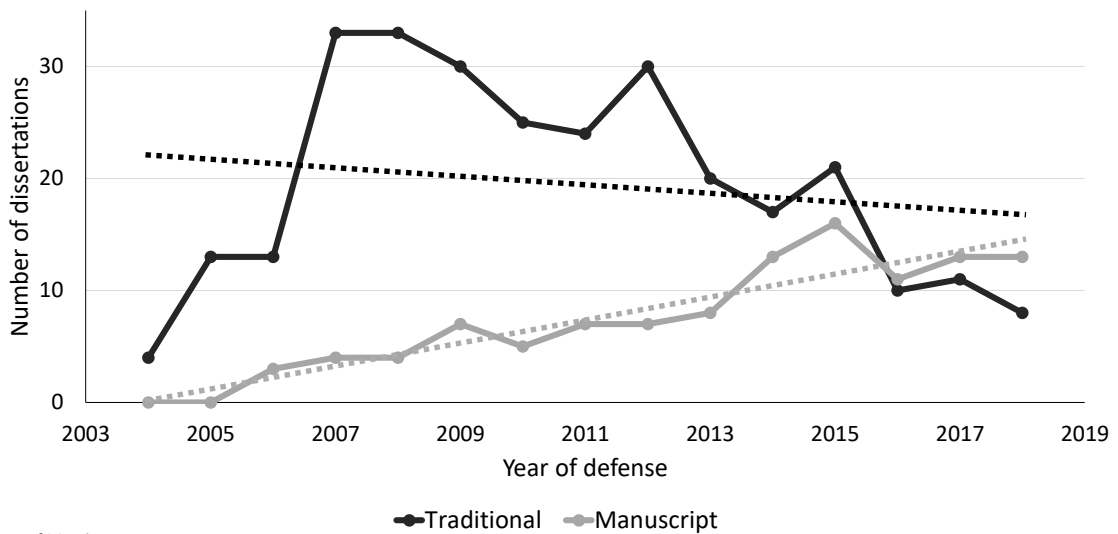
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Study 2 Findings

Study 2 Findings: Preliminary article search
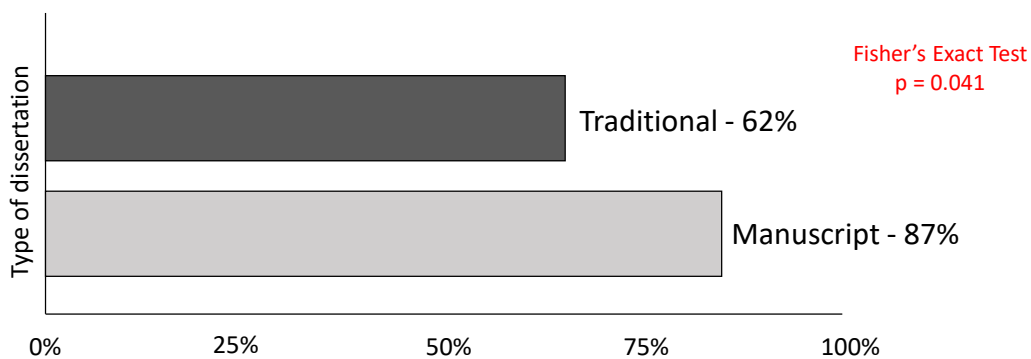
- 60 dissertations searched so far (14% random sample)
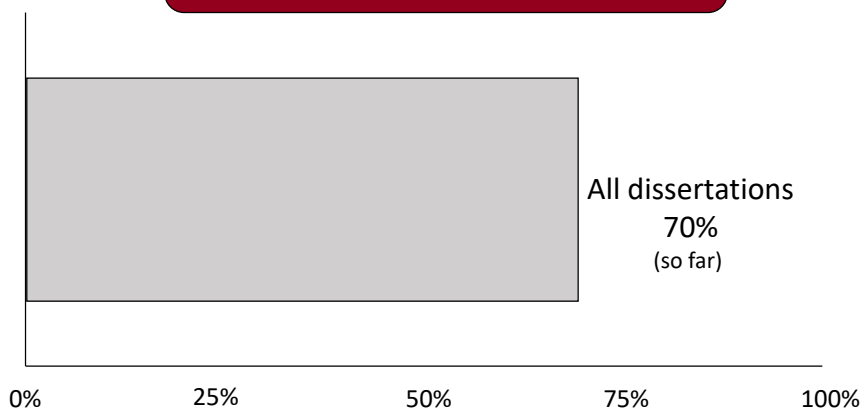
Excluding from remainder of results

Study 2 Findings:

Percent of dissertations with ≥ 1 published article

All dissertations
70%
(so far)

0%   25%   50%   75%   100%

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N=57

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Study 2 Findings:

Percent of dissertations with ≥ 1 published article

Fisher's Exact Test
p = 0.041

Traditional - 62%

Manuscript - 87%

Type of dissertation

0%   25%   50%   75%   100%

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N=57

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Study 2 Findings:

Percent of dissertations with ≥ 1 published article within 3 years of defense

Fisher's Exact Test
p < 0.01

Type of dissertation

Traditional - 50%

Manuscript - 87%

0%   25%   50%   75%   100%

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N=57

57
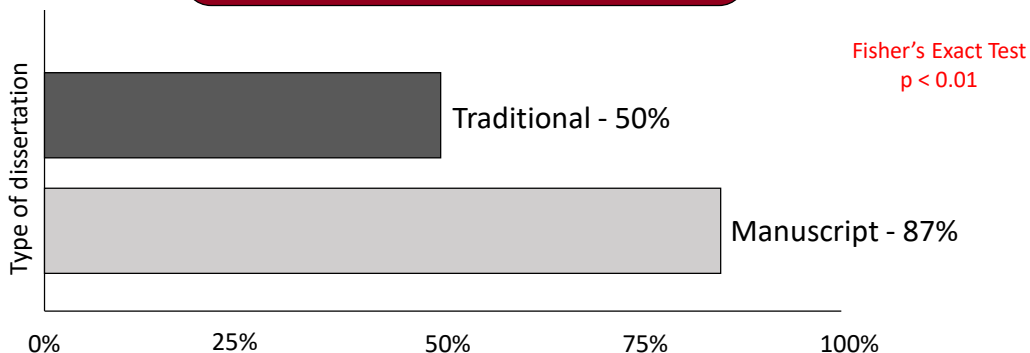
Study 2 Findings:

Likelihood of having ≥ 1 one published article

Modified Poisson   (Std. Err. adjusted for **12** clusters in institution)

atleastone	IRR	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
type_int						
Manuscript	1.498284	.2005081	3.02	0.003	1.152609	1.947629
year	.968293	.0303066	−1.03	0.303	.9106784	1.029553
_cons	8.26e+27	5.20e+29	1.02	0.307	2.28e−26	3.00e+81

Compared to traditional format dissertations, manuscript format dissertations are 50% more likely to result in at least one publication
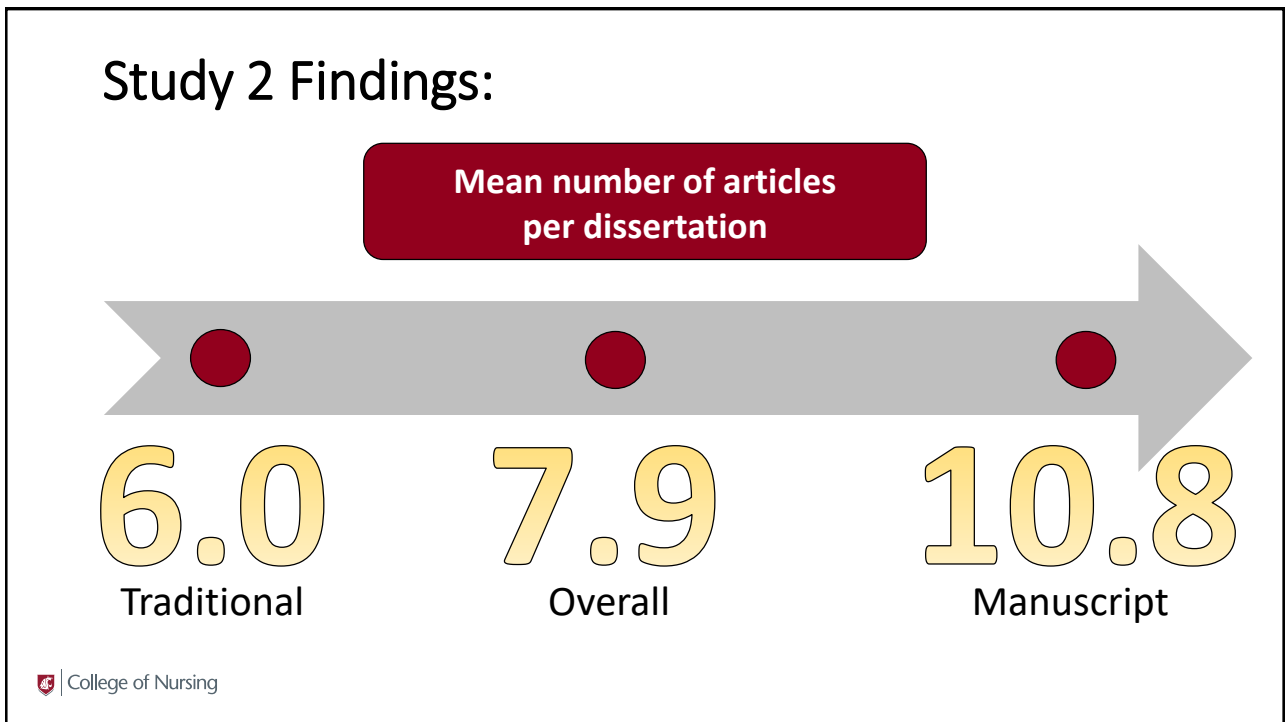
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Pedroza C, Truong VTT. Estimating relative risks in multicenter studies with a small number of centers - which methods to use? A simulation study. Trials. 2017 Nov 2;18(1):512.

N=57

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Modified Poisson   (Std. Err. adjusted for **12** clusters in institution)

atleastone	IRR	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
type_int Manuscript	1.468301	.2013334	2.80	0.005	1.122273	1.92102
year						
2005	1	.	.	.	.	.
2006	1279897	1478800	12.17	0.000	132951.1	1.23e+07
2007	1366302	1467853	13.15	0.000	166371.6	1.12e+07
2008	866633.1	730593.7	16.22	0.000	166054.5	4522929
2009	1194169	1267004	13.19	0.000	149261.3	9553981
2010	796140.9	848546	12.75	0.000	98573.23	6430147
2011	986484.6	1042804	13.06	0.000	124248.9	7832277
2012	1279897	1418159	12.69	0.000	145888.7	1.12e+07
2013	910898.5	1024494	12.20	0.000	100488.9	8256995
2014	639962.9	764594	11.19	0.000	61543.77	6654655
2015	986550.8	1074560	12.67	0.000	116676.4	8341724
2016	1579543	1651389	13.65	0.000	203522.6	1.23e+07
2017	639962.9	765114.3	11.18	0.000	61445.78	6665268
2018	358655.8	410534.1	11.17	0.000	38049.85	3380669
_cons	6.33e-07	6.62e-07	-13.66	0.000	8.16e-08	4.91e-06

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Pedroza C, Truong VTT. Estimating relative risks in multicenter studies with a small number of centers - which methods to use? A simulation study. Trials. 2017 Nov 2;18(1):512.

N=57

59

Study 2 Findings:
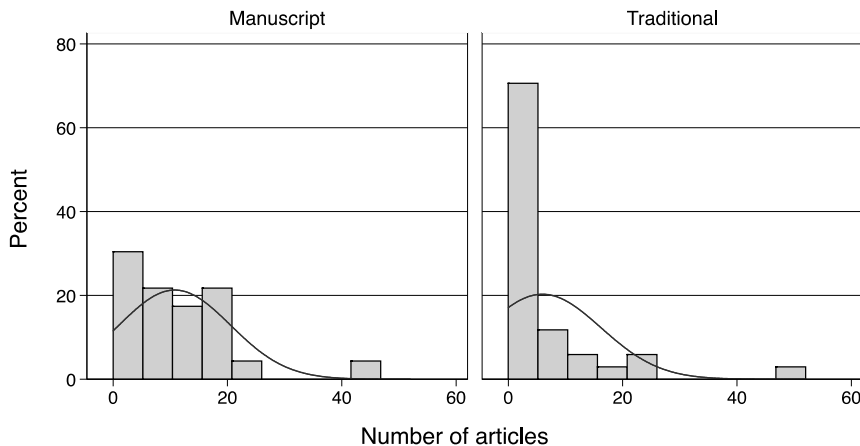
Mean number of articles per dissertation

6.0
Traditional

7.9
Overall

10.8
Manuscript

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Study 2 Findings:

Mean number of articles per dissertation

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
Manuscri	23	10.78261	2.033277	9.751254	6.56585	14.99937
Traditio	34	5.970588	1.754792	10.23211	2.400436	9.54074
combined	57	7.912281	1.355459	10.23349	5.19697	10.62759
diff		4.81202	2.711298		-.6215419	10.24558

diff = mean(**Manuscri**) - mean(**Traditio**)   t = 1.7748
Ho: diff = 0   degrees of freedom = 55

Ha: diff < 0	Ha: diff != 0	Ha: diff > 0
Pr(T < t) = 0.9593	Pr(|T| > |t|) = 0.0815	Pr(T > t) = 0.0407

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N=57

61

Study 2 Findings:

Mean number of articles per dissertation

N=57

62

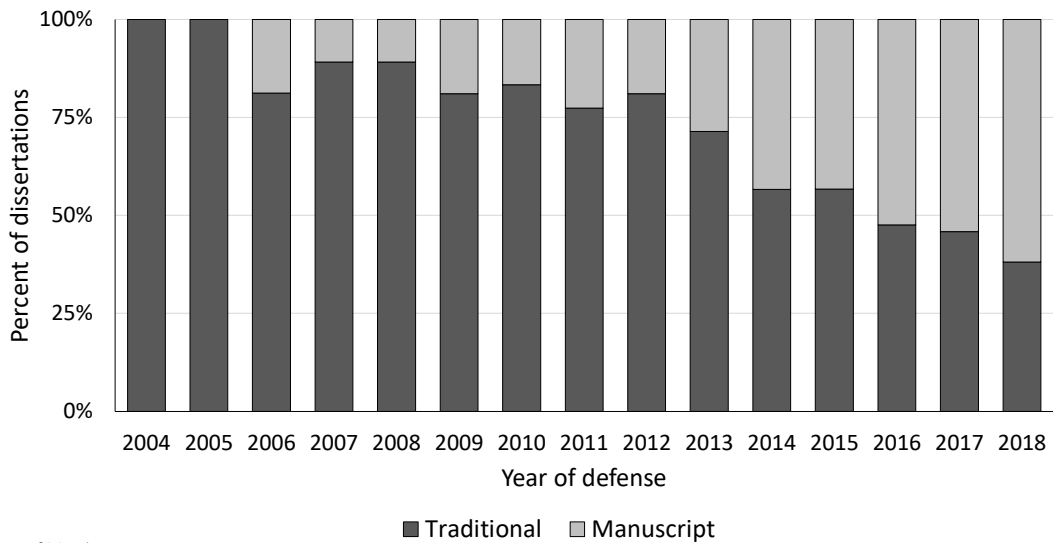## Study 2 Findings:

Mean number of articles per dissertation

Negative binomial

(Std. Err. adjusted for **12** clusters in institution2)

| numberofarticles	IRR	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
type_int	2.382798	.666263	3.11	0.002	1.377462	4.121875
year	.8748053	.0437623	−2.67	0.008	.7931035	.9649236
_cons	1.4e+117	1.4e+119	2.69	0.007	6.63e+31	2.8e+202

Compared to traditional format dissertations, manuscript format dissertations generated a 2.38 higher rate of published articles.

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N=57

63

Study 2 Findings:

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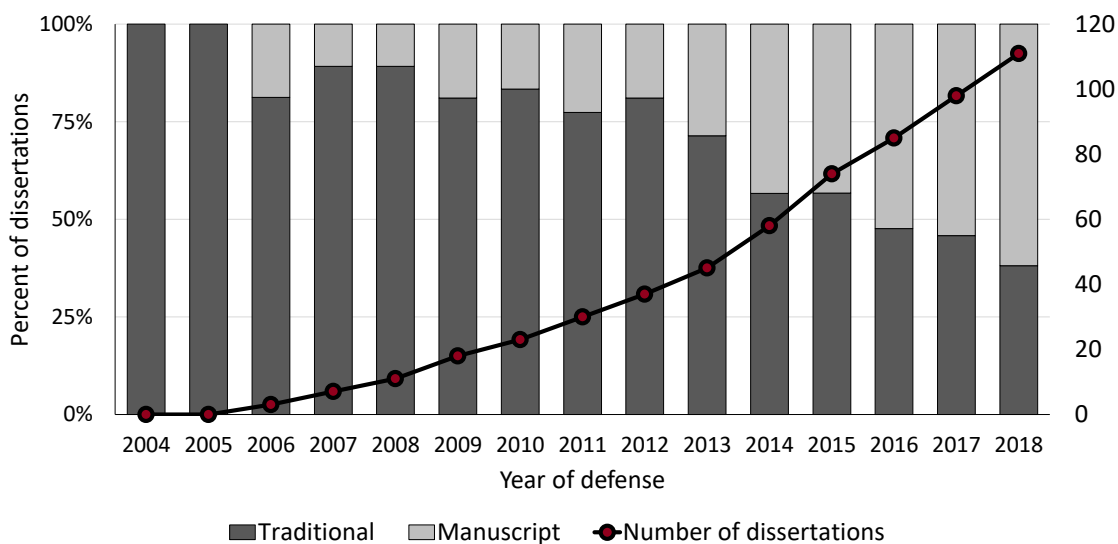
Study 2 Findings:

Study 2 Findings:

Where are our graduates publishing their research?

Manuscript Dissertations

1. *Geriatric Nursing*
2. *International Journal of Nursing Studies*
3. *Journal of Clinical Oncology*
4. *Journal of Nursing Regulation*
5. *Journal of the American Medical Informatics Association*
6. *Medical Care*
7. *Nursing Outlook*
8. *Nursing Research*
9. *Western Journal of Nursing Research*
10. *Wound Repair and Regeneration*

Traditional Dissertations

1. *Advances in Neonatal Care*
2. *Applied Nursing Research*
3. *Biological Research in Nursing*
4. *Clinical Simulation in Nursing*
5. *Early Human Development*
6. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*
7. *Journal of Perinatal and Neonatal Nursing*
8. *Journal of Advanced Nursing*
9. *Journal of Clinical Nursing*
10. *Journal of Nursing Research*

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N=416

Next Steps

Study 2
- Complete article search
- Additional outcomes
  - Time to publication
  - Number of first-author publications
  - Number of coauthors per article
  - Number of times each article is cited
  - Altmetric outcomes
  - Journal metrics
- Additional analysis considerations
  - Account for institutional adoption date
  - Mixed models
  - Survival analysis

- Ideas for future work
  - Simple time series analysis
    - *Does adoption of manuscript option dissertation model increase time-to-publication for traditional dissertations?*

Study 2: Challenges

- Availability of dissertations
  - Embargoed dissertations
  - Not fully available on ProQuest
- Student names

N=7   **Identification errors**

- TOC may not clearly distinguish type of dissertation

N=6   **Misclassification errors**

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Study 2: Limitations

- Institutional sampling frame does not capture all colleges/schools of nursing offering alternative dissertation formats
- Student <u>name changes</u> may result in underestimates of article productivity

- Common student names may result in underestimates
  - ✓ Comprehensive search strategy
- Articles may not be the direct product of the dissertation
  - ✓ Abstract searches
- Scholarly productivity should not be limited to published articles
  - ✓ Searches include books/book chapters, conference presentations, and reports

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Conclusions

- Article search underway
  - Only 356 to go!
- What we can say for sure
  - Traditional dissertation format remains most popular
  - Dissertation options are diversifying
  - Students are adopting new dissertation options

  - Initial evidence shows support of hypothesized relationship between dissertation format (manuscript) and scholarly productivity

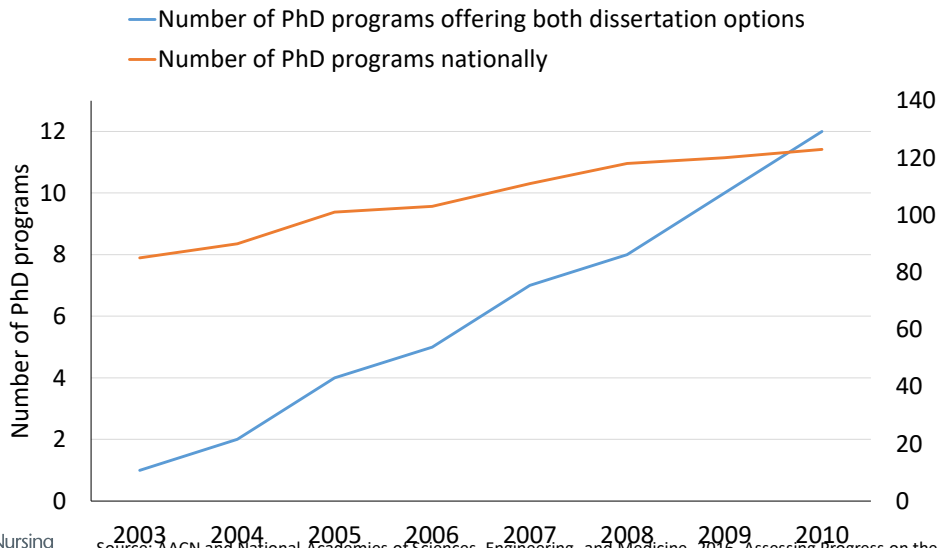College of Nursing

Context: Our plans at WSU

- Finalize policy with PhD Advisory Board
- Consult with Graduate School
- College of Nursing Graduate Faculty must vote to approve
- Bylaws will be changed to include the manuscript option

Thank you! Questions?

Janessa Graves

janessa.graves@wsu.edu

WASHINGTON STATE UNIVERSITY COLLEGE OF NURSING

Study 2 Findings

— Number of PhD programs offering both dissertation options
— Number of PhD programs nationally
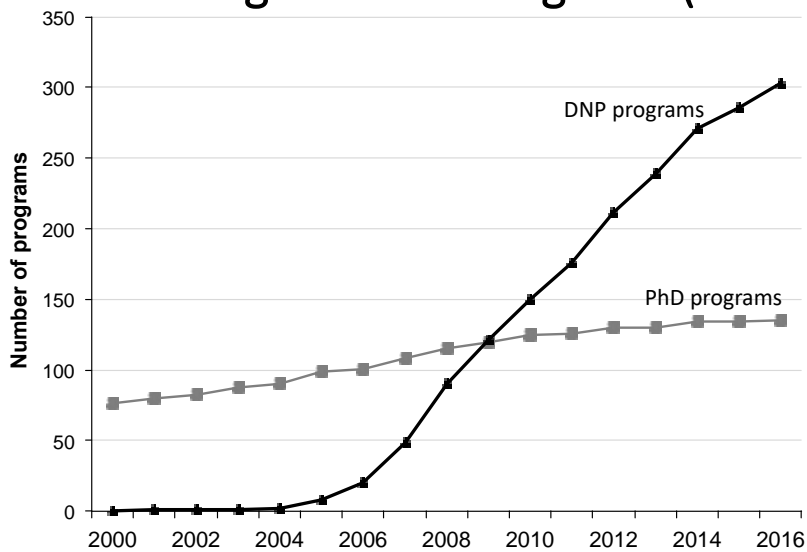
Source: AACN and National Academies of Sciences, Engineering, and Medicine. 2016. Assessing Progress on the Institute of Medicine Report The Future of Nursing. Washington, DC: The National Academies Press. https://www.nap.edu/read/21838/chapter/5#86

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Growth in Nursing Doctoral Programs (2000-2016)

Source: AACN and National Academies of Sciences, Engineering, and Medicine. 2016. Assessing Progress on the Institute of Medicine Report The Future of Nursing. Washington, DC: The National Academies Press. https://www.nap.edu/read/21838/chapter/5#86

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