

Topics: NW 22: Academic work and professional development

## On Nets and Nodes in Organizing Research on Doctoral Education by Means of Research Publishing.

*Keywords:* Doctoral education, research review, network analysis, bibliometrics

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### *Purpose:*

This paper is analysing the international landscape of research on doctoral education in the making of researchers in order to understand how this landscape is organising itself as a research field in nodes and networks working to reproduce/change educational research in different European and Global contexts. We ask; which are important research problems - such as improving qualities and research competencies, or counteracting injustices? Which intellectual traditions are at work in different contexts? Which nodes and networks are organizing research on doctoral education, who are influential agents and where are they located? What implications have this for European research cooperation and the development of educational research in a Global perspective? Answers to such questions are significant for understanding doctoral education and how research communities are responding to challenges in school and society.

The purpose of this study is (a) to map the European as a Global landscape of research on doctoral education in the making of educational researchers, (b) to understand how this field is organising itself in nodes and networks to reproduce or change doctoral education and research, and (c) to understand how contributions from this research are emerging out of conversations in these networks. To realize this purpose is significant in order to understand different research cultures, for international cooperation, and for globalization, as well as to capture how research communities are responding to changes and interests in policy-making and society. It is also our ambition that this study will function as a resource in the making of European and interncontinental research networking in research on doctoral education.

### *Research approach:*

We are interested in the social and intellectual organizing (Whitley, 2000) of research on doctoral education. Which arguments are put forwards in designing and realizing doctoral education programs, which problems are presented, which interests do they represent (Bacchi, 2000) in different networks, and which intellectual traditions are emerging in doctoral education assemblages (DeLanda, 2016) in different global contexts (Connell, 2010)? In this paper we have the ambition to combine a broad mapping of doctoral education research and how this is organizing itself in networks (Czarniawska, 2022) in combination with a specific interest in the making of educational research or sciences (Durkheim, 1950; Furlong & Lawn, 2010; Keiner, 2002). Our study is based on previous studies in doctoral education (Apelgren, Lindblad, Wärvik, 2023; Denicolo, Duke, & Reeves, 2019; Hamilton, Wernersson, & Lindblad, 2003; Kemisso Haybano, Haley, Lindblad, S. & Wärvik, 2021).

### *Methodology, Methods, Research Instruments or Sources Used*

The study is a meta-analysis (Luoto et al., 2017) based on a combination of bibliometric analyses (Garfield, 1979) identifying relevant research publications and how these are recognizing each other (or not) in their referencing. Based on this we are analyzing links between publications and how these are organizing the research field in nodes and nets (Latour, 2010) by means of clustering techniques in Vosviewer (Van Eck & Waltmann, 2010).

By analysing such links, we get a picture of the research field we are interested in in two different ways:

- a) Research fronts based on biographic couplings between publications by means of their referencing, where similar referencing is indicating similar research interests and problem perceptions and positioning in a research field in contrast to alternative referencing, This is in turn assumed to correspond to a social structuring of the research field.
- b) Intellectual traditions on which the research is based by examining the extent to which cited publications are referred to together – or not. If cited texts are referred together to a large extent they are assumed to form an intellectual tradition. And if little of such co-citation is occurring, then this is indicating differences in intellectual traditions

These analyses are based on links between publications, identifying nodes and networks in this research field. In this paper we have to little space for closer analyzing of discursive meanings in specific texts.

Mapping of the research field is based on resources in the ISI Web of Science (WoS). This makes it possible to (a) analyze a large number of scientific publications in depth, and (b) to get data that can be translated into Vosviewer, which makes it possible to analyze links between publications and by that to identify nets and nodes in the research field. The restrictions of including publications in WoS will be considered in reflecting on results and on alternative data sources.

We identified 2098 publications with an interest in doctoral education by searching “doctoral educ” OR “doctoral train\*” as a Topic. The overall results were narrowed to the WoS category “Education and Educational Research” resulting in 952 items. Location of publications in different contexts were identified by researcher affiliations.

### *Conclusions, Expected Outcomes or Findings*

We have identified a set of problem areas and research fronts as networks in the landscape of doctoral education research such as academic writing and publishing, supervision, socialization and research identity, as well as how to deal with mental health and stress among doctoral students. Analyses of co-occurrence of keywords show that the research field is addressing different societal problems considering for instance race, gender, and social inequalities often combined with advice about how to solve them. This problem-representing (Bacchi, 2000) is an important track for further analyses of research networking.

There are networks dealing with changes and transformations of higher education and research, for instance in terms of governance and marketisation. Somewhat surprising we identified little of research dealing with reproduction and change of scientific paradigms in reflections on the making of doctoral education. This implies that other mapping strategies must be used in order to capture this paradigmatic aspect (Kuhn, 1960) of doctoral education research.

This study presents mappings of research on doctoral education – how it is expanding and organizing itself in nodes and networks by scientific publishing and referencing practices. This meta-analysis is complementing previous handbooks and research reviews with its focus on how this field of research is organized and which problems that are dealt with in different networks, for instance in designing doctoral education and its practices and in matters of social and cultural inequalities. Given this the study can be used for identifying research contributions and lack of research in different areas as well as a basis for European research cooperation and development and global research conversations.

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## **Review Result: Accepted**

Your contribution has been accepted for presentation at ECER 2025, Belgrade.

### **Overview of Reviews**

#### Review 1

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#### Evaluation of the Contribution

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Coherence in Argumentation and Methodology	: 8
Awareness of Previous Work and Own Contributions	: 8
European Perspective	: 8
Average [weighted] (out of 10)	: 8

A very interesting proposal that could enhance the current debate on the topic

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#### Review 2

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#### Evaluation of the Contribution

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Coherence in Argumentation and Methodology	: 8
Awareness of Previous Work and Own Contributions	: 8
European Perspective	: 8
Average [weighted] (out of 10)	: 8

A strong paper with a thought provoking thesis and methodology.

### **Additional Comment(s) from the Programme Committee**

Thank you for submitting to ECER 2025.

**Presentation Times Will Be Announced 25 June**

Please note that ECER 2025, Belgrade will last three and a half days, beginning Tuesday at noon with the Opening Ceremony and ending Friday afternoon with the Closing Ceremony.

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