

Meaningful Time for Professional Growth or a Waste of Time? A Study in Five Countries on Teachers' Experiences within Master's Dissertation/Thesis Work

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Meaningful Time for Professional Growth or a Waste of Time? A Study in Five Countries on Teachers' Experiences within Master's Dissertation/Thesis Work

The relationship between master's thesis work and teachers' professional development has rarely been explored empirically, yet. Drawing upon a larger study, this paper investigates how teachers who were studying for or who have recently graduated from Master of Education programmes offered in five countries - Poland, Portugal, England, Latvia, Romania - perceive the usefulness of dissertation/thesis work for their professional development and how they attempt to use their MA research results in their (future) teaching practice. Results suggest that although most respondents recognized their MA dissertation/thesis work as having a positive impact on their professional development by enhancing their professionalism, personal development and growth, and understanding the relationship between research and practice, they were less confident about the use of MA research findings in their (future) workplaces. These results are discussed in the context of current challenges regarding master's level education for teachers, national governments' educational policies, and the relationship between research, teachers' practices and professional development.

Keywords: dissertation/thesis work, master's studies, (student) teacher research, teacher professional development, research-practice relationship

Introduction

An increasing number of studies have indicated the importance of teachers' engagement in and with research as part of their pre-service or in-service education for enhancing their professional development. This is by familiarising them with knowledge of what works in classrooms and why it works, boosting their reflection on teaching practices and enhancing their ability to carry out and use research in their workplaces (Admiraal et al., 2017; Dobber et al., 2012; Dunn, Harrison, & Coombe, 2008; Hine, 2013; Linden et al., 2015; See, Gorard, & Siddiqui, 2016; Snoek et al., 2017; Solzibir, 2007). However, most of these studies refer to (student) teachers' work on small-scale and short-term research projects within specific subjects/courses or action research projects. There is little evidence regarding the perceived value of Master's level thesis work for teachers' professional development. This paper adds to the knowledge base by reporting findings from a study into how teachers enrolled in or having recently graduated from Master of Education programmes offered in five countries - Poland, Portugal, England, Latvia, Romania - perceive the usefulness of dissertation/thesis work for their professional

development and how they attempt (if they do) to use their MA research results in (future) workplace settings.

There is a huge diversity of teacher education models in Europe (Zgaga, 2013), and final thesis experiences also vary considerably in different higher education institutions in European countries. Råde (2014) found that final thesis work can be conceptualised into three different models: the portfolio model, the thesis model, and the action research model. These models are related to two orientations in teacher education: the academic orientation, which stresses the importance of research, research methodology and preparation for doing scientific research (the thesis model), and the teaching-professional orientation with the focus being on the work of the teacher and specific teaching methodologies (the portfolio model) (Råde, 2014, 150). The action research model seems to relate more equally to both.

In this paper we focus on the ‘traditional’ dissertation/thesis¹, which is defined as a written document based on an independent piece of research developed by students under the supervision of a member of academic staff to finalise their MA degree (Anderson, Day, & McLaughlin, 2006; de Kleijn et al., 2012). In using the term MA dissertation/thesis work, we have in mind the whole process of doing research, including such activities as conducting a literature review, formulating research questions, gathering, interpreting and reporting data (Ashwin, Abbas, & McLean, 2017; Hansén, Eklund, & Sjöberg, 2015; Meeus, van Looy, & Libotton, 2004).

Following the assumption that Master’s dissertation/thesis work is important not only for completing master’s degree programmes but also for increasing (future) teachers’ professionalism (Ahlstrand & Bergqvist, 2005; Jakhelln, Bjørndal, & Stølen 2017; Maaranen, 2010; Mattsson, 2008; Råde, 2018), this paper aims to advance insight into the relationship between master’s thesis work and teacher professional development by situating it within the reality of teacher experiences across five European countries. Professional development of teachers is defined here as changes in teachers’ knowledge/understanding, skills, expertise, along with subsequent changes in their professional practice (McChesney & Aldridge, 2019; OECD, 2014; Timperley et al., 2007; Turner & Simon, 2013) that take place as a result of their engagement in MA dissertation/thesis.

This paper is structured as follows: first, we present the background of the study by offering a brief overview of the relevant literature and national and institutional context of this investigation. Second, the methodology and study findings are presented. These findings then

¹ We decided to use both terms put together, because in Portugal this document is called a ‘dissertation’, while in Poland, Romania, Latvia the term ‘thesis’ is more widely used and in England the two terms are synonyms.

are summarized and discussed in the context of current challenges regarding master's level education for teachers, national governments' educational policies, and the relationship between research, teachers' practices and professional development.

Background

The value of Master's dissertation/ thesis work for teachers' professional development

Studies in higher education emphasise that the master's thesis differs considerably from other curriculum (research) assignments in several aspects (de Kleijn et al., 2012). According to de Kleijn (2013, 2) these include: longer duration and credit weighting, the focus of the research being determined to a large extent by the student's intrinsic interests, one-to-one teacher-student interaction, and twofold complex goals - a learning goal and an assessment goal. These characteristics of a master's thesis are common across all disciplines. However, in vocational fields (including teaching) an MA thesis is also required to have professional goals (professional relatedness) (Maaranen, 2010; Mattsson, 2008; Råde, 2018). This aligns with findings from several studies carried out mainly in Nordic countries which have found an MA thesis to be an educational tool with the potential to develop a number of the professional capabilities of (future) teachers. These include: the capacity of self-confidence and analytical thinking, the ability to reflect more deeply on classroom practices, the ability to work in a more self-directed, autonomous and independent way, the capacity to link theory to classroom practice, team working and the ability to develop educational knowledge base (Ahlstrand & Bergqvist, 2005; Jakhelln, Bjørndal, & Stølen 2017; Maaranen, 2010). Similar results were obtained in two other studies in New Zealand by Ward and Dixon (2014) and Dixon and Ward (2015). However, this practical impact is much stronger if the master's thesis is focused on issues related to teachers' practice (Maaranen & Krokfors, 2007).

Despite such potential, some studies also found that, during the writing of the thesis, that teacher-students learned a lot of 'mastering crazy', but they did not feel that this contributed directly to their teaching role (Jakhelln, Bjørndal, & Stølen, 2017; Eklund, 2010). The participants involved in those studies also argued that the process of developing a final thesis in a way hampered their professional development, since they had less time for practical experience and learning in their final year of master's studies.

Use of research-based knowledge in teaching practice: the role of training for research

Much of the research on what helps and what hinders effective research use in teachers' practice pivots around factors concerning the nature of research (e.g. language, content and form),

characteristics of professionals (e.g. motivations, knowledge and skills) and wider institutional context (e.g. support from fellow teachers, headmasters, leaders) (Ion & Iucu, 2016, 604). Some researchers add also here training for research within teacher education as an important factor that enhances (future) teachers' ability to use research in their professional practice (Linden et al., 2012; Linden et al., 2015; Maaranen & Krokfors, 2007; Westbury et al., 2005). However, to accomplish this, as stated by Linden et al. (2015, 5-6), student-teachers should be equipped with knowledge about the aims, goals and kinds of topics that are suitable for research by teachers, designing and conducting research by teachers, criteria for research quality and its application to their own research and reporting research results in a language that could be understood by fellow-teacher.

Furthermore, research has revealed that training for research can enhance teacher's abilities to use research in their practice if it resonates with the overall curriculum and is repeated during the study (Linden et al., 2012). These design principles correspond to the general purposes of a master's dissertation/thesis in teacher education. Thus, bearing in mind the prominent place of the master's thesis in master's degree curricula and its specifics (de Kleijn, 2013), we consider master's dissertation/thesis work as being important not only for teachers' professional development, but also for enhancing their abilities to use research findings in professional practice. In our study, we examine teachers' intentions to specifically use their MA research results in their (future) workplace settings.

In summary, research literature has shown that MA dissertation/thesis work might improve teachers' professional development and increase their ability to utilize research in professional practice. However, most of those results have derived from studies carried out in Nordic countries, where teacher education is strongly academically-oriented, and thereby provides 'promising grounds for this type of research' (Maaranen, 2010, p. 487). The study presented in this paper provides a more international perspective by exploring teachers' views on the usefulness of master's dissertation/thesis work for their (future) teaching practice. More precisely, this study investigates participants' views on (1) the extent to which the focus of their master's dissertation/thesis work is related to teaching practice; (2) the impact of MA dissertation/thesis work on their professional development; (3) the use of MA dissertation/thesis research results in their (future) workplace settings.

The national and institutional context of the study

This paper is based on the results of a wider research project into master's students in education carried out in five European countries (i.e. Poland, Romania, Portugal, England and Latvia)

(e.g. Kowalczuk-Wałędziak, Clipa, & Daniela, 2017). The main purpose of this research was to explore students' views on the usefulness of a master's degree in education and master's degree diploma work for their (future) educational practice. The project was initiated by the researcher from Poland (the first author of this paper), who developed and shared her research interest with researchers from Portugal, Romania, Latvia and England (the co-authors of this paper). These researchers have been working together in other projects (e.g. Kowalczuk-Wałędziak et al., 2017), having a common research interest in higher professional education and belonging to countries where there is an ongoing debate regarding the outcomes of advanced professional education for teachers and other educational professionals (e.g. Geske et al., 2015; Ion & Iucu, 2016; Piekarski & Urbaniak-Zajac, 2015; Sousa, Lopes, & Boyd, 2018; Thomas, 2016). Furthermore, all of these countries are in the European Union but have different histories which shape their education systems and culture: Latvia was part of the Soviet Union, Poland and Romania were so called satellite countries of the Soviet Union. This means that the educational systems in all three of these countries has been influenced by similar educational traditions. England and Portugal, on the other hand, represent different educational traditions, with Portugal emerging from a right-wing dictatorship in the 1970s and Britain having a history as an established, continuous, democracy but an at times fractious relationship with the EU. Such a sample of countries was made in order to gain a broader overview of the situation with master's degrees in education and master's degree diploma work across Europe. Considering the above, the researchers agreed to investigate the master's courses in education offered in their own universities or in other universities in their countries (the case of Portugal) between the years 2016-2018.

Due to the huge variation in M-level programmes in European higher education institutions (including universities involved in this project) (Tauch & Rauhvargers, 2002), this project comprised different types of master's programmes in education (e.g. early years, management of educational institutions, school counselling and emotional education, English language teaching) and involved 645 study participants (predominately females) who had a broad range of backgrounds, in terms of age (from 21 to 60 years old), types and years of professional work experience (from entry level to those who were experienced educational professionals).

Data in this article are limited to a sub-group of the total sample, which comprises teachers who were studying for or who have recently graduated from master's programmes in education that required a dissertation/thesis as a final assessment.

Around the globe, raising teachers' qualification at Master's level is seen as a strategy to improve teachers' professionalism (Snoek et al., 2018; Zuzovsky et al., 2018). Even with this trend, national policies, priorities and requirements for the Master's degree in teacher education differ across contexts. For example, in Portugal, since 2008 (with the first students graduating in 2012) a Master's degree is the basic qualification for pre, primary and secondary school teachers (Ministry of Education, 2007). At the time of this study, in Poland all teachers working in lower and upper secondary schools as well as basic vocational schools were required to obtain a Master's degree (Ministry of National Education, 2009; 2017). Teacher education for primary school teachers (grades 1-3) finishes at bachelor's level²; however, just after the completion of the bachelor's degree, most graduates continue their education to master's level. In Latvia, there is no formal requirement to hold a Master's level degree to be a teacher. Teachers can have 5 levels of qualification, but no extra remittance is given for having a Master's level degree (Cabinet of Ministers, 2017). In most situations teachers enter a Master's degree programme voluntarily. There are two situations when a Master's level degree is formally valued in a professional context – if the teacher wishes to obtain an administrative position or to pursue a doctoral degree. In Romania, for preschool and primary teachers it is compulsory to acquire a bachelor's degree in Science of Education, and for secondary school teachers it is necessary to acquire a bachelors' and Master's degree in a specific scientific field and attend a didactic module during the period of study (Ministry of Education, 2018). Teachers who want to pursue a research career or be very well evaluated follow a Master's degree. In England, there is no requirement to complete a Master's degree prior to qualifying as a teacher. There are three routes towards qualification: a bachelor's degree in education including teaching practice, a postgraduate certificate in education which is a largely vocational course without a Master's thesis although some study might be at Master's level and thirdly a range of in service qualifications that enable teachers to attain 'qualified teacher status', while in post. Some teachers may then decide to study towards a Master's in education.

Even with differences, recently, there has been a growing interest in developing teaching as a M-level profession in all European countries. This raises questions about the professional relevance of different aspects of academic teacher education programmes (Eklund, 2018). As a thesis/dissertation, as mentioned, places considerable importance on scientific methods and rigour, to focus on its impact and relevance for professional practice could be a good strategy

² Since 2019, according to the regulation of Ministry of Science and Higher Education (2018), all individuals who would like to work in pre-school and early school education should attend long-cycle master's studies.

to go deeper into the relationships between research and teachers' practices and professional development.

The overall aim of the dissertation/thesis work in all the master's programmes in which the respondents in this study were involved is to design and complete an independent but supervised piece of research on a clearly defined topic. It is a *sine qua non* for obtaining the MA degree, accounting for at least 30% of the student's final grade. The dissertation/thesis is required to be a single document, organised into the following sections: introduction; literature (relevant theories and concepts) review; methodology section; findings and discussion section; and conclusion. There are no formal criteria for selecting topics for a thesis/dissertation. For Polish, Latvian, Romanian and Portuguese participants, in order to obtain a master's degree, the dissertation/thesis must be positively evaluated by the student's supervisor and a second reader according to specific criteria established by institutions, and then successfully defended orally. As regards the examined sample from England the thesis is evaluated by two markers – the supervisor and another one. There is no oral defence.

Methodology

Setting and participants

As previously mentioned, this investigation is part of a larger survey-based study into master's degree students in education across five European countries. A convenience sampling method was used for this study, in which students enrolled in or having recently graduated from master's degree programmes in education offered in the authors' own universities or others in their countries were asked to participate on a purely voluntary basis.

The participants for this particular study were 429 teachers from Poland (134, 31.2%), Portugal (45, 10.5%), Romania (141, 32.9%), Latvia (68, 15.8%) and England (41, 9.6%). The participants were carefully selected from our wider study based on the following criteria: (1) each of them had enrolled in or had recently graduated from a Master's programme in education requiring a dissertation/thesis as a final assessment; (2) they were professionally oriented towards teaching (ie: they were current teachers; or they were involved in courses focused on teachable subjects, such English language or Mathematics).

The participants of the present study were predominantly female. Their ages varied from 22 to 60 years old. Some of them had little or no school teaching experience, while others were experienced teachers (with over 30 years' teaching experience) working in different positions in all types of schools. The majority of the study participants attended MA studies as continuous

professional development. A further detailed description of the study sample by country is given below.

Poland. All the Polish participants (N=134) were involved in a two-year master's level programme designed for primary school teachers (grades 1-3; early school education), which was available full-time (N=87) and part-time study (N=47). There were 131 females and 3 males between the ages 23 to 46. The majority of the participants have been recently certified to teach in early school education via bachelor's studies. At the time of completing a survey, 32 participants had school teaching experience varying from 1 to 19 years.

Portugal. All the Portuguese participants (N=45) for this study attended a two-year master's programme with a dissertation requirement after their initial certification, as continuous professional development. They were active pre-, primary and secondary school teachers who acquired a master's degree, via different universities in Portugal, in several scientific areas related to teaching. There were 39 females and 6 males. Their ages varied from 28 to 60 years old and all of them were enrolled in a full-time study programme (evening classes). They had between 3 and 38 years of school teaching experience.

England. The participants from England (N=41, 36 females and 5 males) came from master's programmes in education available full-time over one year (N=13) and part-time over a longer period (N=28) of up to five years. Their ages varied from 22 to 55 years old (23 participants did not indicate their ages). The majority of the respondents were active teachers (N=30) with school teaching experience varying from 2 to 36 years. Some of them held leadership positions.

Latvia. The Latvian participants in this study (N=68) were 64 females and 4 males between the ages of 22 to 51, enrolled in two master programmes (one-year professional master's degree and two-year research master's degree) with a thesis requirement available for full-time (N=52) and part-time study (N=16). At the time of completing the survey, 48 participants had school teaching experience varying from 1 to 27 years.

Romania. All the Romanian participants (N=141) were enrolled in a full-time two-year master's level programme. The sample included 133 females and 8 males whose ages ranged from 23 to 54 years old. Most of the participants were active teachers (N=126) with experience in teaching between 1 and 37 years.

Data collection and ethical issues

A survey questionnaire (in paper and online form) was used to collect data in all countries. The questionnaire was initially developed in English by the first author and then sent to the other members of the research team. They recommended introducing some minor changes in the format and content of the questionnaire in order to ensure its applicability and relevance to their national contexts. Then, the questionnaire was translated by the authors into four other languages, i.e. Polish, Portuguese, Latvian and Romanian. The questionnaire includes 29 items (multiple choice, forced-choice, closed-scale and open-ended questions) organised into four sections: (1) a section on participants' demographics; (2) a section on participants' experience of their master's degree programme in general; (3) a section on participants' experience of the process of completing the master's degree final project; and (4) a section on participants' suggestions for improving the quality of master's degree programmes to better prepare them for their professional work. This article utilizes answers to four questions included in the section regarding master's degree final project experiences.

All the participants from Poland, Romania, Latvia and England were surveyed during the process of writing their theses, whereas most of the respondents from Portugal answered the survey after completing the dissertation. In most cases the questionnaires were administered by researchers themselves. In Portugal, where the data were also collected in other higher education institutions, the author also asked key colleagues, such as professors in those institutions, to share a link to the online form of the questionnaire to current or former teacher students.

In order to achieve consistency regarding an ethical approach with this cross-national study, it was designed so as to conform to the standards outlined in the 'British Education Research Association (BERA) revised ethical guidelines' (2011, 2018). As at present there are various differing national guidelines regarding ethics.

The participants for this study were all adults, who would be fully able to conceptually understand the nature of a research study and within this to understand informed consent (BERA, 2018; Taber, 2013). All the participants were informed about the aims of the study, assured about anonymity and confidentiality and participated of their own volition. All identifying information (e.g. titles of master's dissertation/theses) have been removed, when the participants' answers from open-ended questions have been cited.

In all but one case the researchers involved in this study collected data from students who they had taught. The exact relationship varied between individuals and between institutions. However, in all cases the ethical risks this carries were mitigated as well as possible

and in line with other similar questionnaire-based studies using common strategies (Bryman, 2016). Specifically: participants did not include their name, questionnaires were sent directly to a central point to be collated and converted into numeric and graphic data (the first author's institution). Qualitative answers were isolated before being coded and analysed. Shared analysis was conducted on the collated statistical data and not using the original questionnaires to ensure anonymity (Brooks, te Riele, & Maguire, 2014; Neuman, 2014).

Data analysis

For the quantitative data, totals and percentages were calculated. The process of analysing the qualitative data was organised into two stages: first, once data collection in all five countries was completed, we decided to require a common language for facilitating the process of data analysis. Therefore, all the responses to each open-ended question were translated by the researchers from their respective languages into English and sent in separate documents to the first author in order to identify initial codes and categories emerging from the data based on the common coding scheme for each open-ended question; second, the coding and categorisation were discussed by the members of the research team to reach the final list of categories for each open-ended question.

For the purpose of this paper, the results included in the section below account for answers given by the participants in all five countries, without any references to other variables (e.g. age, gender). However, it should be noted that due to the convenience sample, this study should not be viewed as comparative, but rather as highlighting some differences and similarities between the five groups of teachers in different national settings.

Results

The results are structured around participants' views on (1) the extent to which the focus of their master's dissertation/thesis work is related to teaching practice; (2) the impact of MA dissertation/thesis work on their professional development; (3) the use of MA dissertation/thesis research results in their (future) workplace settings.

1) Participants' views on the extent to which the focus of their master's dissertation/thesis work is related to teaching practice

The participants were asked to indicate to what extent the key issues of their master's dissertations/theses were related to their field of study, research interests, and the needs and expectations of current educational practice (Figure 1).

[Insert Figure 1 here]

A relatively large proportion of the respondents in all the countries reported that the key issues explored within their dissertations/theses were related to a large extent to the field of study, research interests and the needs and expectations of current educational practice. However, this proportion was slightly greater among the participants from Romania (79.5%; 83.7%; 83.0%, respectively) and Portugal (84.5%; 95.6%; 75.6%, respectively). Conversely, participants from England were less likely to acknowledge this (58.6%; 53.6%; 61.0%, respectively).

2) Participants' views on the impact of master's dissertation/thesis work on their professional development

A total of 63.7% participants in all locations (more than 70% in Portugal and Romania) indicated that their master's dissertation/thesis had a positive impact on their professional development. However, there were also some participants (particularly from Poland, Latvia and England) who considered this impact as medium or even low (Table 1).

[Insert Table 1 here]

Participants, when answering this question, were invited to express more detailed comments to their answers. The majority of respondents made positive comments and referred to three main issues: enhancing professionalism; personal development and growth; and increasing their understanding of the relationship between educational research and practice. We discuss these aspects in detail below.

Enhancing professionalism

When considering the impact of master's dissertation/thesis work on professional development, the participants in all five locations referred mostly to enhancing their professionalism. They highlighted that master's dissertation/thesis work allowed them to extend their knowledge base, not only concerning the topics of their MA dissertations/theses, but also on other topics found

in the references for the dissertations/theses, for example: ‘Searching literature for my thesis increased my knowledge on many other educational topics’.

In addition, the participants reported that they gained or strengthened a number of skills and qualities, e.g. critical thinking, responsibility, diligence, communication skills, teamwork skills, ability to write and to plan their work, self-discipline, analyzing data and drawing conclusions autonomously, patience, time management and problem-solving skills, for example: ‘I am able to manage my time better’, ‘I’ve become more disciplined’, ‘I am able to have better relations with other people’. This, in turn, enabled them to improve or change their teaching practices, to be more aware of different (alternative) perspectives on teaching and learning and to feel more secure and stronger when they are confronted with students’ problems. As one participant stated: ‘It allowed me to understand student behaviour better and think about them in a different way’. Two other participants added: ‘Better understanding of current new practices’ and ‘Applying new teaching strategies’.

In the case of some participants (mainly from Romania and Portugal), pursuing the master’s dissertation/thesis also affected the perceived importance of collaboration in schools, for example: ‘It allowed to develop collaborative and cooperative attitudes among colleagues’.

Personal development and growth

Although to a lesser extent, the respondents also talked about their personal development and growth. They highlighted that completing the dissertation/thesis gave them opportunities to feel like an expert in the chosen area of research, for example: ‘(...)I feel like an expert in emotional education’. The participants also noted that the work on their master’s dissertation/thesis increased their self-esteem and triggered their intellectual growth, for example, ‘It allowed me to improve my self-esteem’. A few respondents from Portugal and Poland mentioned that completing the master’s dissertation/thesis had had a positive impact on their career promotion through, for example, ‘new leadership positions’ or ‘next stages of their professional path’.

Increasing the understanding of the relationship between educational research and practice

Some respondents reported that the dissertation/thesis work increased their understanding of the relationship between educational research and practice and stimulated their interest in using research literature and research findings to (re)design their teaching practice. For example, one participant stated: ‘I am now keen to ensure that all changes or “working” elements of my job are research based’. Another respondent added: ‘I am more capable of using research sources

for improving my lessons'. Other answers highlighted an increased interest in academic work by enhancing knowledge about research methodologies and scientific writing skills.

However, not all the surveyed respondents were so positive in regard to the impact of MA dissertation/thesis work on their professional development. They mainly pointed to the irrelevance of the MA dissertation/thesis to their professional practice or research interests and to challenges in doing research and scientific writing and to the lack of time for writing their dissertations/theses, exemplified by one of the respondents from England who claimed that: 'It is difficult to maintain working and studying'. In most cases, they preferred alternative forms of end-of-degree assessment: a report on practicum or an exam.

3) Participants' views on the use of MA dissertation/thesis research results in their (future) professional practice

Two additional questionnaire items asked participants about their intentions regarding a) applying and b) disseminating the research results obtained in their MA dissertations/theses in their (future) workplace settings.

a) Application of research results

More than half of all the surveyed respondents (54.9%) said that they were (or would be) implementing the MA research findings in their (future) professional practice. There were some differences between countries. The vast majority of Portuguese participants (81.8%) reported that they would use the research findings, whereas more than half the Polish respondents (52.3%) were not sure about this (Table 2).

[Insert Table 2 here]

The respondents had the opportunity to give examples of ways in which they were (or would be) using the results in their (future) professional practice. Their answers fall into three categories in a sequence of incidence as follows: pedagogical work and reflection, relationship with the school and colleagues and 'academic' work. We describe these categories below.

Pedagogical work and reflection

This category mainly involves the practical application of specific teaching methodologies or materials that are the objects or outcomes of the theses/dissertations, for example, 'pedagogical

differentiation', 'students' learning processes', 'field trips', 'disciplinary measures', 'encouraging students to do research', or 'pedagogical innovations'. The participants also mentioned that they used their (own) research instruments to diagnose students' problems.

This category also involves reflection on the curriculum, methods and techniques before or after the pedagogical act.

Relationship with the school and colleagues

This category was related to the perception of teamwork, specific functions and competences such as supervision and preparation of new projects, and the type of work at school in which the phases of investigation and the research competences acquired during the master's course ensure effective action (e.g. evaluation).

'Academic' work

Within the third category, the respondents considered using the results of their master's dissertations/theses in tasks more similar to 'academic work', such as publication, presentation of papers, and the writing of official documents.

b) Dissemination of research results

The respondents had varied opinions on the dissemination of research findings from master's theses/dissertations in their (future) professional practice: 47.4% of the respondents answered 'don't know', and a similar proportion of the respondents (40.6%) said that they were (or would be) disseminating it. The data reveals a wide variation between countries. While a relatively large proportion of participants from Portugal (72.1%) said that they were (or would be) disseminating research, more than half the respondents from Poland and Romania (58.6% and 50.4%, respectively) were not sure about this. Interestingly, more than quarter of Polish respondents (27.8%) indicated that they were not going to do so (Table 3).

[Insert Table 3 here]

The participants who declared that they were (or would be) disseminating research in their (future) practice were invited to provide examples of ways of dissemination. Two categories emerged from the data: dissemination within the school; and communicating research findings with the wider community. We discuss these categories below.

Dissemination within the school

First of all, the participants mentioned dissemination within their school settings, in day-to-day work, particularly during staff meetings (for fellow teachers or head teachers), lessons for students, and lectures for parents.

Communicating research findings with the wider community

The participants talked about sharing research findings with a wider professional or academic community by formal publication of some parts of the dissertations/theses in academic journals or books, materials for educational practitioners, school websites and other media (Facebook, twitter, blogs) used by teachers.

Discussion

The aim of this exploratory study was to investigate how teachers enrolled in or having recently graduated from master's programmes in education from five European countries - Poland, Portugal, England, Latvia, Romania - perceive the usefulness of MA dissertation/thesis work for their professional development and how they attempt to use the MA research results in (future) workplace settings. Given the diversity of the sample and the exploratory nature of this study, the findings should not be viewed as comprehensive, but rather as being another step in addressing the lack of research on the practical impact of this element of master's curricula in countries other than Nordic.

Based on the results of this study, we have highlighted several findings that may have implications for a deeper understanding of the relationship between MA dissertation/thesis work and teachers' professional development. First, our results indicated that even though the participants for this study were enrolled in or had recently graduated from different master's programmes in education, they had positive views on the relevance of the key issues of their dissertations/theses to their study field, research interests, and needs and expectations of current educational practice.

Second, considering the above, it may not be surprising, that the respondents highly valued MA dissertation/thesis work for their professional development. Indeed, as some previous research has indicated, the practical impact of MA dissertation/thesis work is much stronger if its focus relates to teachers' practice. Many participants indicated that MA research work helped them to increase knowledge in the field of education and develop a number of skills and abilities to resolve problems "in real life". This, in turn, allowed them to improve or change their classroom practices. This is consistent with research into the value of master's

dissertation/thesis work for teachers' practice (Ahlstrand & Bergqvist, 2005; Eklund, 2010; Maaranem, 2010) and, more internationally, into the value of (student) teacher research for increasing their professionalism (Admiraal et al., 2017; Linden et al., 2012). An unexpected result stemming from this study was that master's dissertation/thesis work changed the participants' views on the relationship between educational research and teachers' practice. The participants emphasized that this experience led them to '(re)discover educational research' and its great potential for improving educational practice and reinforced their views on the usefulness of scientific writing skills for their everyday work with official school documents or reports. Such results seem to be in contrast with some previous studies indicating that engaging in and with academic research is useless for teacher's practice (Ion & Iucu, 2014). Participants in this study provided a number of examples of how master's dissertation/thesis research work may facilitate teachers' practice and professional development. These seem also to support Råde's (2018) and Snoek et al.'s (2017) suggestions that the final degree projects by research may be considered as integrators or boundary crossers between academic and professional knowledge.

Third, even though the participants for this study reported that they developed their understanding of the research-practice relationship, they were less confident about the use of MA research findings in their (future) workplaces. The possible explanation for this is the lack of teacher's skills in transferring and using research in their practice, evidenced in several studies (Ion & Iucu, 2014; Reis-Jorge, 2007). The participants were also sceptical about the dissemination of MA research results. Such a result is possibly concerning, because undissemminated research cannot be used to inform practice.

Our study also suggested some potential differences between the views of participants from the respective countries on the usefulness of master's dissertation/thesis work for their (future) practice. For example, participants from Romania and Portugal considered MA thesis work as strongly contributing to their (future) professional practice. This seems to be particularly important in the Romanian context, considering that after the communist transformation "Romania experienced a growing interest in the potential of research for school improvement" (Ion & Iucu, 2016, p. 605). Within this, teachers who strongly recognize the value of scientific research may be agents of change within their schools.

In the Portuguese case these findings can be due to the fact that the majority of the participants have chosen by their own to complete a MA and so the respective Dissertation as continuous professional development, but also to the fact that they were doing their Master in Education (Sciences) in Universities with study plans strongly valuing teachers' research to the

improvement of teaching practice. It is also worth noting here, that most of the Portuguese participants were surveyed after the completion of their dissertation. Taking into account that 'emotions and the associated learning experiences are always situated in a certain time, context and overall life situation' (Anttila et al., 2017, p. 457-458), the fact of having completed this challenging work could have made their responses more positive.

On the other hand, bearing in mind that the vast majority of respondents from both countries were experienced teachers, these results seem to add a positive voice to the international discussion on the impact of in-service master's level qualification programmes on teachers' professionalism (Snoek et al., 2018; Zuzovsky et al., 2018).

The participants from Latvia, although to a lesser extent, also found that the MA thesis had a positive impact on their own practice. This may be considered as an important voice in an ongoing national debate around the necessity of raising the minimum teachers' qualifications to the master's level (Geske et al., 2015).

Participants from England and Poland, in turn, seemed to be a little bit more sceptical about the contribution of master's thesis work to their (future) professional work. Regarding the Polish participants' views, this scepticism may stem from the fact that some of them had no or little professional work experience; thus, they do not yet have the overview to understand the value of this element of their study programme for their future practice. Furthermore, as some authors suggest (Gołębnik & Krzychała, 2015), the gap between what happens in university classrooms and teaching classrooms has been identified for many years as one of the main problems of teacher education system in Poland.

Conversely in England the majority of participants for this study were experienced teachers who have been working in schools for several years and often hold senior leadership positions. The difference between the value they put on master's work but the relatively lower impact it has in practice may stem from this background. It may be that they perceive themselves as skilled practitioners as leaders or teachers and that they are undertaking master's study for other reasons. This could be for self-development, for future careers in higher education or governance or simply for interest in more theoretical aspects of education (Thomas, 2016). On the other hand, the views of these participants seem to reflect to some extent more general national concerns related to developing teaching as an M-level profession in England (e.g., Burton & Goodman, 2011; Thomas, 2016). According to the conclusions of Thomas's (2016) review, concerns within England specifically included: whether master's level study could be directly connected to improvements in teaching and whether structural developments within the core curriculum are seen by teachers as connected to improving

classroom practice. The disconnect between the interest in masters' studies but the perceived lack of applicability to practice could reflect teachers balking at increased centralisation by exploring education in individualistic ways, not directly connected to directed practice.

Although teachers' views on the usefulness of Master's dissertation/thesis writing for their professional development varied to some extent across different national and institutional settings, this study gives the strong impression that investment in Master's education and training for research is worth financial and humanistic endeavour, to develop teaching as a profession, to enhance teachers' professional development, and to transform their views on the potential impact of educational research on teaching practice (Admiral et al., 2017; Ion & Iucu, 2016; Snoek et al., 2018).

Limitations and further research

This study has some limitations that might be addressed in ongoing studies. The most obvious limitation of this study is its convenience and diverse sample. Exploring the views of participants with a wide range of ages and teaching experiences necessarily limits the generalisability of the study and possibility of applying advanced statistical calculations. However, the potential strength of such an approach is that it enables a rich, range of experiences to be explored and discussed. It also enables commonalities to be sought that can be applied beyond a narrow category of individuals (Rubin & Rubin, 2012). Another important limitation of this study, which could have had an impact on the results, is that we were not able to ensure an equal number of participants in all five locations. Therefore, in order to gain more insight into the usefulness of master's dissertation/thesis work for teaching practice, further research should include the perspective of teachers from other universities in these countries, as well as of the supervisors of their dissertations/theses, other university members and school staff.

Finally, the majority of the respondents expressed their perception at the moment when they were in the process of studying. These results are not triangulated with the views of teachers who work in the field of education after a longer period after having completed their master's studies. It is possible that after this longer time period that teachers find out that their research work done via their master's dissertations/theses is valuable in their work or *vice versa*, that this did not have further relevance for their ongoing practice. In further studies, we recommend a longitudinal investigation giving a time-based perspective on teachers' opinions on MA research work at the beginning and the end of the MA programme as well as a few years later.

Conclusion

Even with the above-mentioned limitations, through this cross-national study, we gained a deeper understanding that MA dissertation/thesis work in teacher education programmes may be considered not only as one of the requirements for obtaining a master's degree, but also as an important element of Master's curricula for enhancing teachers' professional development and to some extent increasing their capacity to use MA research findings in their practice. However, to foster this impact it is important for academic staff (teacher educators, supervisors) to allow teacher students to investigate topics closely related to the teaching profession within their MA dissertations/theses. Furthermore, teachers involved in master's level studies should be more encouraged and supported to learn how to use and implement research findings effectively. If master's education and training for research are considered to be a strategy to increase teachers' professionalism (European Commission/EACEA/Eurydice, 2015; Snoek et al., 2017; Snoek et al., 2018; Zuzovsky et al., 2018), then the importance of discussing and doing research relevant to professional and school development is crucial. We would add, too, that a higher level of teacher education can be reached by studying on master's level programs. This can contribute to attaining the goal agreed via the Bologna agreement of 2018, when it was agreed that countries would promote and support institutional, national and European initiatives in the field of higher education in order to develop and enhance strategies for teaching and learning. This agreement also emphasized that particular attention would be paid to those activities which are focused on combining academic and work-based learning, and that link research and innovation. This is mainly due to the huge potential these activities have for developing those critical and creative mind-sets which may enable students to find novel solutions to emerging challenges (Paris Communique, 2018).

Disclosure statement

No potential conflict of interest was reported by the authors.

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Table 1. Perceived impact of master’s dissertation/thesis work on professional development (%)

The extent to which work on the master’s degree dissertation/thesis impacted professional development							
		Very high impact	High Impact	Medium impact	Small impact	Very small impact	Total
Poland	N	16	66	32	10	10	134
	%	11.9	49.3	23.9	7.5	7.5	
Portugal	N	22	10	7	3	1	43 ^a
	%	51.2	23.3	16.3	7.0	2.3	
England	N	5	17	10	7	2	41
	%	12.2	41.5	24.4	17.1	4.9	
Latvia	N	14	19	16	6	13	68
	%	20.6	27.9	23.5	8.8	19.1	
Romania	N	51	52	26	6	6	141
	%	36.2	36.9	18.4	4.3	4.3	
Total	N	108	164	91	32	32	427
	%	25.3	38.4	21.3	7.5	7.5	

^a Data missing for N=2

Table 2. Application of MA dissertation/thesis research results (%)

		Are you going to apply the research findings from your master's dissertation/thesis to your future professional practice (or are you applying them now)?			
		Yes	Don't know	No	Total
Poland	N	38	69	25	132 ^a
	%	28.8	52.3	18.9	
Portugal	N	36	8	0	44 ^b
	%	81.8	18.2	0.0	
England	N	26	13	2	41
	%	63.4	31.7	4.9	
Latvia	N	44	23	1	68
	%	64.7	33.8	1.5	
Romania	N	90	50	1	141
	%	63.8	35.5	0.7	
Total	N	234	163	29	426
	%	54.9	38.3	6.8	

^a Data missing for N=2

^b Data missing for N=1

Table 3. Dissemination of MA dissertation/thesis research results (%)

		Are you going to disseminate the research findings obtained during preparation of your master's dissertation/thesis in your workplace (or are you disseminating them now)?			
		Yes	Don't know	No	Total
Poland	N	18	78	37	133 ^a
	%	13.5	58.6	27.8	
Portugal	N	31	10	2	43 ^b
	%	72.1	23.3	4.7	
England	N	23	17	1	41
	%	56.1	41.5	2.4	
Latvia	N	38	26	4	68
	%	55.9	38.2	5.9	
Romania	N	63	71	7	141
	%	44.7	50.4	5.0	
Total	N	173	202	51	426
	%	40.6	47.4	12.0	

^a Data missing for N=1

^b Data missing for N=2

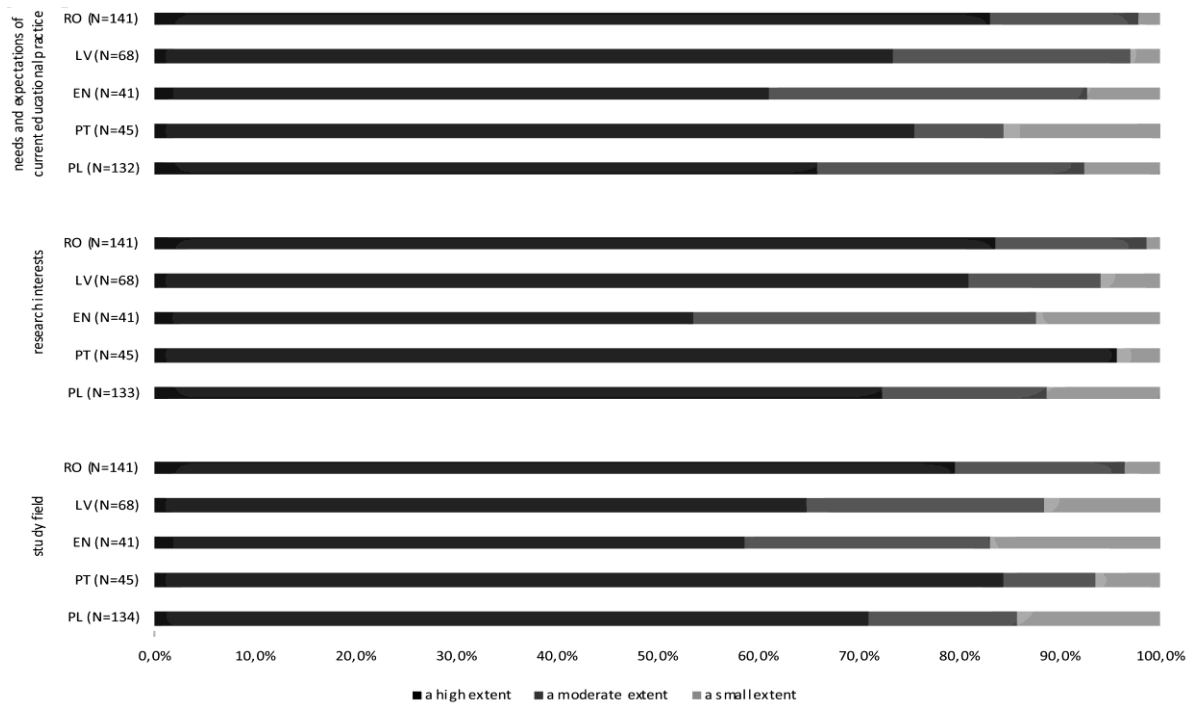


Figure 1. Perceived relatedness of master's dissertations/theses to the field of study, research interests and the needs and expectations of current educational practice (%)

Note: PL=Poland; PT=Portugal; EN=England; LV=Latvia; RO=Romania

Data missing for $N(PL)=2$ (needs and expectations of current educational practice) and $N(PL)=1$ (research interests)