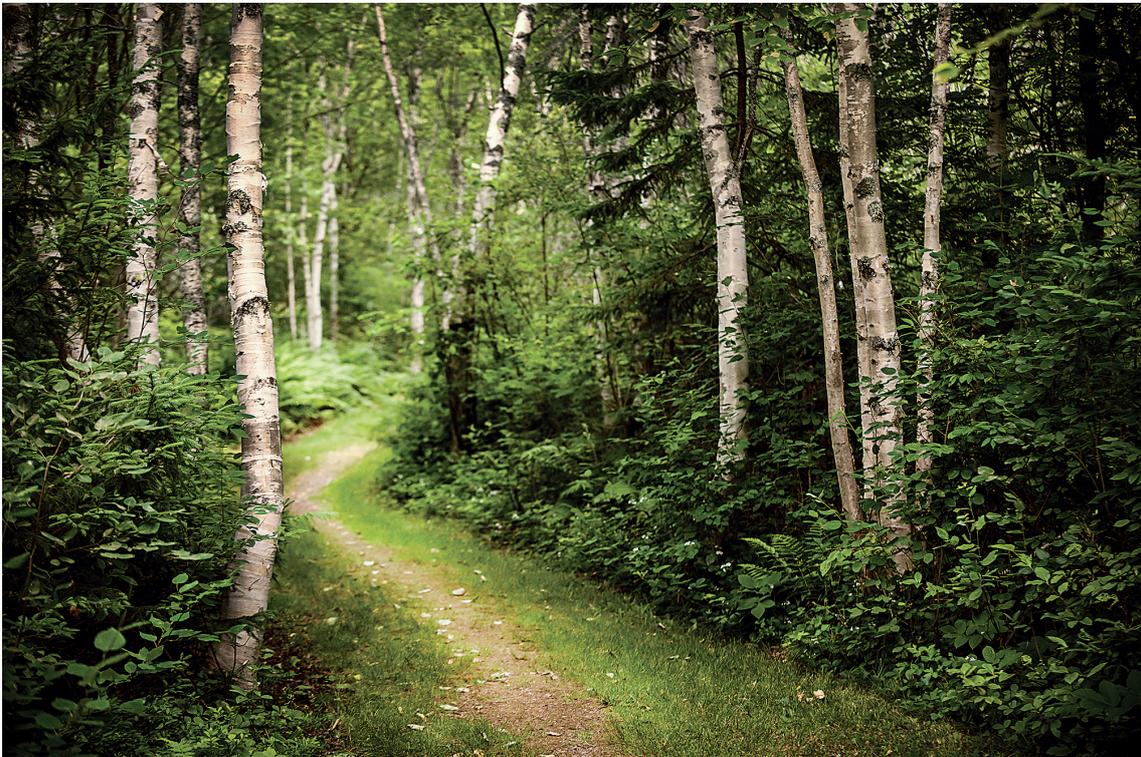


JYU DISSERTATIONS 54

Eileen McEvoy

Professional Journeys and Research Lives of Physical Education Teacher Educators



UNIVERSITY OF JYVÄSKYLÄ
FACULTY OF SPORT AND
HEALTH SCIENCES

JYU DISSERTATIONS 54

Eileen McEvoy

**Professional Journeys and
Research Lives of Physical
Education Teacher Educators**

Esitetään Jyväskylän yliopiston liikuntatieteellisen tiedekunnan suostumuksella
julkisesti tarkastettavaksi yliopiston vanhassa juhlasalissa S212
helmikuun 22. päivänä 2019 kello 12.

Academic dissertation to be publicly discussed, by permission of
the Faculty of Sport and Health Sciences of the University of Jyväskylä,
in building Seminarium, auditorium S212, on February 22, 2019 at 12 o'clock noon.



JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ

JYVÄSKYLÄ 2019

Editors

Jarmo Liukkonen

Faculty of Sport and Health Sciences, University of Jyväskylä

Timo Hautala

Open Science Centre, University of Jyväskylä

Cover picture: Pixhill.com / elenathewise

Copyright © 2019, by University of Jyväskylä

This is a printout of the original online publication.

Permanent link to this publication: <http://urn.fi/URN:ISBN:978-951-39-7673-6>

ISBN 978-951-39-7673-6 (PDF)

URN:ISBN:978-951-39-7673-6

ISSN 2489-9003

Jyväskylä University Printing House, Jyväskylä 2019

ABSTRACT

McEvoy, Eileen

Professional Journeys and Research Lives of Physical Education Teacher Educators

Jyväskylä: University of Jyväskylä, 2019, 72 p.

(JYU Dissertations,

ISSN 2489-9003; 54)

ISBN 978-951-39-7673-6

During the early years of research in the subject area of physical education (PE), Lawson (1991) set out an agenda for bettering our understanding of those who educate teachers of this subject. Among the research questions he identified as worthy of consideration were their career pathways and the motivations for and impact of their research endeavours. The research presented in this thesis had four aims: (i) to scope the extant literature on PE teacher educators, (ii) to examine the professional views of an international group of PE teacher educators regarding the purpose of their subject, (iii) to determine what influenced participants' entry to, and development within, their profession, and (iv) to explore participants' motives for and engagement with research.

A scoping review of literature was conducted, including a total of 96 papers on PE teacher educators. It was found that, while much is known about US physical education teacher educators, there were many knowledge gaps regarding this population in other countries. Among these gaps was a relative absence of data on the career pathways and research lives of PE teacher educators. Two rounds of individual in-depth semi-structured interviews were also conducted with 14 PE teacher educators across seven countries. A descriptive approach was taken to the analysis of data. The full data corpus was divided into data sets, which were then explored in addressing the aims of the research.

This study provides a number of insights which may inform future research on PE teacher educators and may be helpful in considering how best to support PE teacher educators in their roles. Examining the professional views of participants regarding the purpose of PE, a relative consensus on the overarching purpose was evident, centred on PE preparing young people for a lifetime of physical activity. The views of many had changed over time, influenced by such factors as findings from research and contextual forces. Regarding the professional journeys of participants, the findings illustrated the influence of professional relationships on the entry to, decisions within and development of participants' professional journeys. In focusing on the research lives of participants, it was found that research motivated by practical and contextual drivers, such as job requirements or a wish for promotion, was often associated with feelings of frustration and stress. Research driven by personal or altruistic motives, such as desire to improve practice or a desire to enhance personal learning, often elicited feelings such as enjoyment and passion. Time constraints, skill gaps and language barriers were all seen as challenges to research endeavours, while experiential learning and collaboration with others were seen as key facilitators.

The findings are discussed in the context of related literature and considerations for research and practice are presented. Among these is a suggested need for constructive conversations regarding the professional learning needs of PE teacher educators, as they pertain to fostering positive professional relationships and engaging in supported, meaningful and valuable scholarly activities.

Author Eileen McEvoy, MSc
Faculty of Sport and Health Sciences
University of Jyväskylä, Finland

Supervisors Professor Pilvikki Heikinaro-Johansson
Faculty of Sport and Health Sciences
University of Jyväskylä, Finland

Professor Ann MacPhail
Department of Physical Education and Sport Sciences
University of Limerick, Ireland

Reviewers Professor Hal Lawson
Department of Educational Policy & Leadership
University at Albany, State University of NY

Professor Jean Murray
CASS School of Education and Communities
University of East London

Opponent Professor Mary O'Sullivan
Department of Physical Education and Sport Sciences
University of Limerick, Ireland

TIIVISTELMÄ

McEvoy, Eileen

Professional Journeys and Research Lives of Physical Education Teacher Educators

Jyväskylä: University of Jyväskylä, 2019, 72 p.

(JYU Dissertations,

ISSN 2489-9003; 54)

ISBN 978-951-39-7673-6

Hal Lawson (1991) on aikoinaan esittänyt tutkimusagendan, jonka tavoitteena oli lisätä ymmärrystä opettajankouluttajista, jotka kouluttavat liikunnanopettajia. Tärkeää olisi ymmärtää opettajankouluttajien urapolkuja, tutkimusmotivaatiota sekä tutkimuksen tekemisen vaikutuksia työuraan. Tämän väitöskirjatutkimuksen neljä tavoitetta olivat: (i) selvittää Lawsonin viitekehyksen pohjalta, millaista liikunnan opettajankouluttajiin kohdistuvaa tutkimusta on tehty, (ii) tutkia, miten eri maalaisten opettajankouluttajien ammatilliset käsitykset muodostuivat, ja mikäli käsitykset ajan kuluessa muuttuivat, niin mistä muutos johtui, (iii) selvittää, mitkä asiat vaikuttivat opettajankouluttajan ammattiin päättymiseen ja ammatilliseen kehittymiseen, (iv) tutkia osallistujien motiiveja ja sitoutumista tutkimuksen tekemiseen sekä selvittää tutkimustyötä haastavia ja edistäviä tekijöitä.

Tutkimus käynnistyi systemaattisella kirjallisuuskatsauksella käyttäen *scoping review* -menetelmää. Liikunnan opettajankouluttajia käsitteleviä tutkimusartikkeleita löytyi yhteensä 96. Tulokset osoittivat, että aikaisempi tutkimus käsitteli pääasiassa amerikkalaisia opettajankouluttajia, eikä tutkimuskirjallisuudesta löytynyt juurikaan tietoa opettajankouluttajien urapoluista ja tutkimustoiminnasta. Tutkimuksen seuraava vaihe sisälsi puolistrukturoituja syvällisiä yksilohaastatteluja, jotka toteutettiin kunkin osallistujan kanssa kahdesti. Haastatteluihin osallistui yhteensä 14 kokenutta opettajankouluttajaa seitsemästä eri maasta. Aineiston analysoinnissa käytettiin kuvailevaa sisällön analyysia.

Tutkimus nosti esiin uusia näkemyksiä, jotka voivat ohjata liikunnan opettajankouluttajia käsittelevää tutkimusta tulevaisuudessa, ja joita huomioimalla opettajankouluttajia voidaan tukea moninaisissa työtehtävissä. Opettajankouluttajat jakoivat yhteisen näkemyksen siitä, että liikuntakasvatuksen tärkein tehtävä on ohjata nuoria elinikäiseen liikunnan harrastamiseen. Opettajankouluttajien tutkimustoiminta ja ulkoiset tekijät, kuten pätevyysvaatimukset tai toive ylennyksestä, olivat muuttaneet ajan kuluessa monen haastateltavan käsityksiä. Opettajankouluttajien uraan vaikuttivat uran alussa luodut henkilösuhteet, jotka ohjasivat heidän valintoja ja urapolkua. Tutkimuksen tekeminen aiheutti turhautumista ja stressiä silloin, kun tutkimuksen kannustimena olivat ulkoiset tekijät. Tutkimuksen tekeminen koettiin myönteisenä tilanteessa, jossa tutkimustyö perustui henkilökohtaisiin tai altruistisiin motiiveihin, kuten haluun parantaa opetusta tai haluun oppia uutta. Tutkimukseen tekemiseen liittyvinä haasteina koettiin käytettävän ajan rajallisuus, puuteelliset taidot ja kieleen liittyvät rajoitteet. Tutkimustyötä puolestaan tukivat erityisesti kokemusperäinen oppiminen ja yhteistyö.

Tulokset osoittavat, että tarvitaan avointa ja rakentavaa keskustelua opettajankouluttajien ammatillisen kehittymisen tarpeista, joita huomioimalla voidaan edistää opettajakouluttajien ammatillista yhteenkuuluvuutta ja osallistaa heitä merkitykselliseen ja arvokkaaseen tieteelliseen toimintaan.

ACKNOWLEDGEMENTS

I would like to express heartfelt thanks to the 14 people who shared their time, their thoughts and their experiences to contribute to this research. The generosity and openness they displayed was inspiring and will always be remembered fondly.

I gratefully acknowledge the support, guidance and friendship of my two supervisors, Pilvikki and Ann. They were ever ready when I needed help or encouragement and allowed me to find my way through this research process without the feelings of pressure or overwhelm which can often accompany such a process. Thanks to them, the completion of this PhD was a pleasant and rewarding learning experience.

Gratitude is also extended to my two external examiners, Prof Hal Lawson and Prof Jean Murray, for their willingness to take the time to consider and provide feedback on my initial draft. Receiving the constructive insights of such respected academics at such a crucial stage in the process was truly heartening. Further, to my opponent, Prof Mary O'Sullivan, thank you. I know how fortunate I am to have you involved.

To my good friends and colleagues in Ireland and Finland, on whom I could rely for laughter, patient ears, encouragement, wine and wise words at all times, I say kiitos, thank you. You have confirmed my faith in how decent people can be.

LIST OF ORIGINAL PUBLICATIONS

This thesis is based on the following original publications, which are referred to in the text by their Roman numerals:

- I. McEvoy, E., MacPhail, A., & Heikinaro-Johansson, P. (2015). Physical education teacher educators: A 25-year scoping review of literature. *Teaching and Teacher Education*, 51, 162-181. DOI: 10.1016/j.tate.2015.07.005
- II. McEvoy, E., Heikinaro-Johansson, P., & MacPhail, A. (2017). Physical education teacher educators' views regarding the purpose(s) of school physical education. *Sport Education and Society*, 22(7), 812-824. DOI: 10.1080/13573322.2015.1075971
- III. McEvoy, E., Heikinaro-Johansson, P., & MacPhail, A. (2018). An exploration of the influence of professional relationships on the career pathways of teacher educators. *European Physical Education Review*. DOI: 10.1177/1356336X18785106
- IV. McEvoy, E., MacPhail, A., & Heikinaro-Johansson, P. (2018). Research lives of physical education teacher educators. *Curriculum Studies in Health and Physical Education*, 9(1), 90-103. DOI: 10.1080/18377122.2017.1418180

TABLES

TABLE 1	Overview of study participants.....	21
TABLE 2	Overview of data collected.....	23
TABLE 3	Core domains into which data units were categorised.....	24
TABLE 4	Summary of breakdown of articles, countries and journals during review period	36
TABLE 5	Overview of topics addressed by reviewed papers	37

FIGURES

FIGURE 1	Overview of research design and timeline.....	20
FIGURE 2	Overview of review process	35

CONTENTS

ABSTRACT

TIIVISTELMÄ

ACKNOWLEDGEMENTS

LIST OF ORIGINAL PUBLICATIONS

TABLES AND FIGURES

CONTENTS

1. INTRODUCTION.....	11
1.1. Literature on Teacher Educators	12
1.1.1. Professional Journeys of Teacher Educators	12
1.1.2. Teacher Educators as Researchers	13
1.2. A Focus on Physical Education Teacher Educators.....	14
1.3. Focus and Contribution of this Study.....	16
1.4. Structure of this Summary	17
2. AIMS OF THE STUDY	18
3. RESEARCH DESIGN AND METHODOLOGY.....	19
3.1. Overall Research Design and Timeline	19
3.1.1. Phase 1: Open exploration	19
3.1.2. Phase 2: Focused exploration	19
3.2. Methodological Approach.....	20
3.3. Methods.....	20
3.3.1. Participant selection.....	20
3.3.2. Interviews.....	22
3.3.3. Data analysis.....	22
3.4. Trustworthiness of the Data.....	25
3.5. Ethical Considerations	25
3.6. Delimitations and Limitations	26
4. CONCEPTS AND THEORIES FRAMING THE PRESENTATION OF FINDINGS	28
4.1. Value Orientations and Occupational Socialisation Theory	28
4.2. Social Cognitive Career Theory	29
4.3. Researcher Affect	30
5. SCOPING REVIEW OF LITERATURE ON PE TEACHER EDUCATORS (PAPER I).....	32
5.1. Review Process.....	33
5.2. Review Findings	35

5.2.1. Descriptive overview	35
5.2.2. Thematic overview.....	37
5.2.3. Overview of research on the professional journeys and research lives of teacher educators	37
5.2.4. Overall conclusions from the review	39
5.2.5. Contribution to the thesis	40
6. FINDINGS FROM INTERVIEWS WITH PE TEACHER EDUCATORS (PAPERS II-IV)	41
6.1. PE Teacher Educators' Views Regarding the Purpose(s) of School Physical Education (Paper II)	41
6.1.1. Same picture, different frames	41
6.1.2. Boundaries of the subject	42
6.1.3. Changing views over time	42
6.1.4. Contribution to the thesis	43
6.2. Professional Journeys of PE Teacher Educators (Paper III).....	44
6.2.1. Entry to the profession	44
6.2.2. Key career landmarks.....	45
6.2.3. Professional learning as teacher educators	46
6.2.4. Contribution to the thesis	47
6.3. Research Lives of PE Teacher Educators (Paper IV).....	47
6.3.1. Research motives and choices	47
6.3.2. Research barriers	48
6.3.3. Research facilitators	49
6.3.4. Contribution to the thesis	50
7. DISCUSSION AND IMPLICATIONS OF FINDINGS.....	51
7.1. Research on PE Teacher Educators	51
7.2. Evolution of Professional Views.....	52
7.3. Professional Relationships and Entry to the Profession	53
7.4. Professional Relationships and Professional Development and Learning	54
7.5. Experience as Researchers	55
7.6. Communicating Research Across Linguistic Boundaries.....	56
REFERENCES.....	58
APPENDICES.....	67

1 INTRODUCTION

Those who educate teachers are somewhat unique among the various academics found in higher education. While all academics prepare students for life and work beyond higher education, the work of teacher educators has an added dimension because the majority of those they educate will subsequently go on to educate others and prepare them for life, work and study beyond school. Teacher educators have, therefore, a double responsibility within the field of education. A European Commission report reminds us that 'if teachers are the most important in-school factor influencing the quality of students' learning, the competences of those who educate and support teachers must be of the highest order' (European Commission, 2013, cited in Kelchtermans, Smith, & Vanderlinde, 2018, 121).

This thesis focuses on a group of teacher educators within a specific subject area (physical education). It examines the influences on their professional views and career decisions and explores their relationship with research. The importance of examining the professional journeys of teacher educators lies in the explanatory value such research might hold for better understanding why it is these people, and not others, who are educating our future teachers and shaping teaching and learning practice. The relevance of focusing on gaining a better understanding of how, why and to what end teacher educators engage in research lies in the fact that teacher educators often inform practice through their scholarly endeavours. Ultimately, by exploring the influences on the professional views, careers and research lives of teacher educators, it may be possible to better support the professional learning needs of those who shape and inform education practice.

Literature on teacher educators has spanned numerous topics, with researchers providing useful insights into the careers and research lives of teacher educators, which will now be summarised.

1.1 Literature on Teacher Educators

Recognising the centrality of teacher educators within the overall field of education, various scholars have attempted to improve our understanding of this unique population. The important role of teacher educators is reflected in the array of research that has been published, often in special issues, in recent years (e.g. Erickson, Young, & Pinneger, 2011; Korthagen, Loughran, & Lunenberg, 2005; Murray & Harrison, 2008; Swennen & Bates, 2010). Broad themes related to teacher educators that have received attention in the literature include the professional identities of teacher educators (Erickson et al., 2011; Hökkä, Vähäsantanen, & Mahlakaarto, 2016; Izadinia, 2014; Tryggvason, 2012), their professional development (Bates, Swennen, & Jones, 2011; Ben-Peretz, Kleeman, Reichenberg, & Shimoni, 2010; Czerniawski, Guberman, & MacPhail, 2017; Swennen & Bates, 2010; Van der Klink, Kools, Avissar, White, & Sakata, 2017), and their practice (Bronkhorst, Meijer, Koster, & Vermunt, 2011; Gelfuso, 2017; Vanassche & Kelchtermans, 2014). Murray suggests that it is curious that despite emphasis being placed on the importance of good educators and high-quality teaching for pupil learning, and teacher education receiving increased focus internationally, there is relatively little consideration of teacher educators 'throughout their career courses' as central figures in education (Murray, 2016, 36). An examination of the available evidence does suggest a leaning towards the early years of teacher educators' professional journeys, as well as a focus on those who become teacher educators after spending some time as teachers in schools.

1.1.1 Professional Journeys of Teacher Educators

Many teacher educators enter the profession 'accidentally', having begun in part-time roles or having been casually recruited from schools involving pre-service programmes (Mayer, Mitchell, Santoro, & White, 2011; Murray, 2016). There are commonly two routes to teacher education: one where a person remains in higher education, gains a PhD, and begins to teach as part of their academic role, and another where a person teaches in a school setting for considerable time before returning to higher education and taking up an academic role (Morberg & Eisenschmidt, 2009). Czerniawski et al. (2017) highlight the fact that the routes teacher educators take into the profession can influence their professional learning needs. Much empirical research to date on teacher educators has centred on their initial socialisation and early-career experiences, with particular reference to transitions from the role of school teacher to work in higher education (e.g. Harrison & McKeon, 2008; Murray & Male, 2005; Russell & Loughran, 2010; Murray, 2016). It is understood the transition from school teacher to teacher educator can be a difficult and complex one (Murray & Male, 2005). The two common areas for development identified among beginning teacher educators who come to higher education from school teaching centre on developing a pedagogy of teacher education and

becoming research active (Murray & Male, 2005). Less is known about the socialisation of those who remain in higher education, without first teaching in school for a substantial period of time. It is generally accepted, however, that the professional needs of those entering the teacher education profession have not always been matched by provided supports (Williams & Ritter, 2010; Williams, Ritter, & Bullock, 2012).

Acknowledging the relative absence of research on the professional journeys of teacher educators beyond the early years, a number of recent studies have looked at the mid- and late-career stages of teacher educators' careers (Griffiths, Thompson, & Hryniewicz, 2014; Kosnik, Menna, Dharamshi, Miyata, & Beck, 2013; Montenegro Maggio, 2016). The work of Kosnik et al. (2013) focused on literacy teacher educators in four countries, exploring their knowledge, identities and career turning points. Their participants pointed to influential experiences, relational interactions and practices which shaped their professional identities and approach to their role. Most reported their careers had followed a serendipitous career path with few having planned to end up in academia. In her study of Chilean teacher educators, Montenegro Maggio (2016) stressed the social and cultural situatedness of career pathways of teacher educators. Griffiths and colleagues explored the career experiences and landmarks of 12 mid-career teacher educators in England (Griffiths et al., 2014). These authors found that as their participants progressed through their careers they were given professional acknowledgements and key management and research responsibilities, all of which impacted in turn upon their sense of professional identity. Relationships with others were foregrounded as being a particularly important contextual factor influencing the professional journeys of participants.

As teacher educators journey along their career pathways, they must perform a continuous 'balancing act' regarding how they divide their time between teaching, research and service (Berei, et al., 2017, 455). How and why teacher educators engage with the scholarly aspect of their work is a topic that is attracting increasing interest.

1.1.2 Teacher Educators as Researchers

Brew and Lucas (2009) emphasise the need to gain a clearer understanding of how academics conceptualise research and how research fits within their broader academic roles. There has been a growing demand in recent decades for teacher educators to become research active (Livingston, McCall, & Morgado, 2009). One of the first papers to engage fully with the emerging interest in the research role of teacher educators was that of Cochran Smith (2005), which featured in one of the first special issues dedicated to this profession (Korthagen et al., 2005). Cochran Smith argued that the role of teacher educator requires an ability to function 'simultaneously as both researcher and practitioner' (2005, 219). The expectation that teacher educators continue to learn and supplement the knowledge base of their field, and

teaching and learning more broadly, is seen as a factor contributing to the increased emphasis on scholarly enquiry among this population. The following key concepts have been suggested as pivotal in the drive for teacher educators to marry their practitioner role with that of researcher: the dynamic nature of knowledge as ever-evolving, the need to take account of societal changes and prepare learners for the future, the need to attend to changing educational contexts, the need for continuous learning and professional development, and the imperative to better understand teaching and learning (Livingston et al., 2009, 192).

The increased demand for teacher educators to become research active has also been rooted partially in the external pressures brought to bear through institutional audit procedures that have come to pervade higher education institutions (particularly universities) in many countries (Livingston et al., 2009). Globalisation, neo-liberalism and other forces have also led to increased competition between higher education institutions with research performance being seen as key to their branding efforts (Scott, 2009). This has resulted in tighter control of research activities and a type of audit culture in which individual academics are often measured by the weight of their publication metrics (a situation evocatively represented by Sparkes, 2007).

It has been found that the dual teacher-researcher role can be particularly challenging for those who enter academia from a previous career as practitioners in schools (Murray, 2016). Reviewing literature on ex-practitioner teacher educators, Saito found that such teacher educators, in addition to grappling with adjustment to new identities and new work environments, can sometimes have a 'fear of research' (Saito, 2013, 191). Echoing the literature into the career socialisation of teacher educators, little is known about the socialisation into research of those who remain in higher education without first teaching in a school. As expectations regarding research productivity have changed over time, it can be perhaps assumed that even some experienced teacher educators who remained in academia found themselves grappling with new questions and identifying new professional learning needs. A recent survey of 1,158 teacher educators across six countries, including both those who remained in academia and those who first taught in schools, found that 'research skills' was their most cited professional learning need (Czerniawski, et al. 2017, 133). This finding emphasises the value of exploring further the research lives of teacher educators.

1.2 A Focus on Physical Education Teacher Educators

It has been suggested that studying groups of academics within their subject areas can provide useful insights into the professional lives of contemporary academics (Boyd & Smith, 2016). Kosnik and colleagues have called for more discipline-focused research focused on the lives and work of mid- and late-career teacher educators, in line with the work they have completed with

literacy teacher educators (Kosnik, Miyata, Cleovoulou, Fletcher, & Menna, 2015).

In the context of the existing literature on teacher educators, as outlined in the previous sub-section, this thesis focuses specifically on mid- and late-career teacher educators in the subject area of physical education (PE). As with teacher educators in other fields, PE teacher educators embody an array of consequential professional roles (Kirk & MacDonald, 2001). They generate discourse through their research endeavours and through their involvement in national and international research and policy communities. They translate this discourse into practice through the construction of PE teacher education curricula and they facilitate initial teacher education programmes, support the continuing professional development of practicing teachers and fulfil various service commitments.

In line with much research, the focus of this thesis began with a personal interest. Since 2005, the researcher had worked with and supported the International Association for Physical Education in Higher Education (AIESEP). She had attended the AIESEP conference almost every year, coming into contact with hundreds of PE teacher educators from across the globe. She also spent a number of years working in higher education in Ireland and Finland, supporting the work of both PE teacher educators and PE teachers in schools. She was surrounded by PE teacher educators and was interested in exploring their professional lives and motivations. She was curious as to how these people came to be in their current roles, how they experienced their roles, and what influences acted upon their professional decisions and career journeys. Her interest was a general one, and she wished to proceed in a systematic way, allowing her general interest in this population to be narrowed through a review of literature and exploratory interviews with a selection of PE teacher educators.

During the early years of research in the subject area of PE, Lawson set out an agenda for the exploration of those who educate teachers in this subject area. His seminal paper presented interested researchers with a rationale and framework for scholarship on this population (Lawson, 1991). Among the research questions Lawson identified as worthy of consideration were: (i) the personal, behavioural and institutional facilitators and constraints of the work of PE teacher educators, (ii) the paradigmatic and occupational communities they occupy, (iii) how they are socialised into the profession, (iv) their careers and career pathways, and (v) the motivations for and impact of their research endeavours. Providing a rationale for addressing such research questions, Lawson made a number of salient points which remain relevant nearly thirty years later. He suggested that by understanding the professional contexts, communities and career pathways of PE teacher educators, we may be better positioned to support effective systems of career guidance, recruitment, professional development and job satisfaction. Further, he argued that exploration of the research work of PE teacher educators might enhance our

understanding of both how the subject's knowledge base is defined, and how teacher educators' research endeavours impact on practice.

At the time of the commencement of the current study, the only paper involving an in-depth exploration of the careers of a group of later-career PE teacher educators was that of Dodds (2005), which looked at the biographies, careers and socialisation of 54 female PE teacher educators in the US, with a specific focus on participants' experiences of being mentored during their careers. Mentors were found to provide support, challenge, exposure to opportunities, and modelling of professional conduct during the participating teacher educators' careers. The gradual embrace of the research aspect of the work of PE teacher educators has been dated back to the 1960s and 1970s, during which time professors and graduates of PE teacher education programmes in the US and their counterparts around the world began to carve out a place for research in their academic roles (Dodds, 2009; Lawson, 1990; Locke, 1984). The first large-scale study on the research work of PE teacher educators, conducted by Metzler and Freedman (1985), revealed that: i) they published, on average, one peer-reviewed publication every four years; ii) they rarely subscribed to journals outside of the subject area of PE; iii) just 9% had more than 10% of their work time allocated to research activities; and iv) 16% placed research in the top three ways in which they would like to spend their work hours, while 47% placed research in the top three ways in which they believed their institution would like them to spend their work hours. A subsequent qualitative study from the same era also found participants' role orientations to be at odds with institutionally-defined role expectations (Mitchell & Lawson, 1986). However, at the commencement of this study no data on the research lives of PE teacher educators had been published in close to 20 years.

1.3 Focus and Contribution of this Study

The research presented in this study focuses on the professional journeys and research lives of 14 mid- to late-career PE teacher educators, based in seven countries. The systematic approach to the review of literature included in the study provides the first comprehensive overview of research on PE teacher educators. The analysis of interviews with participants reveals insights regarding how their professional views were shaped over time, the importance of relationships to their initial socialisation and subsequent career decisions, and the barriers and facilitators to their research efforts, as well as the underlying feelings they associated with engagement in research.

1.4 Structure of this Summary

This thesis summary is divided into seven sections. Following this introductory section, the aims of the study are summarised in Section 2. Section 3 provides a brief overview of the research design and methodology, while Section 4 explains some key concepts and theories framing the presentation of findings. Section 5 focuses on the review of literature, while Section 6 provides an overview of the findings from the interviews. The summary concludes, in Section 7, with a discussion of implications of the findings.

2 AIMS OF THE STUDY

This thesis began with a general interest in the professional journeys of PE teacher educators and sought to examine the literature on this population and explore the lived experiences of an international group of 14 mid- and late-career PE teacher educators. This is an article-based thesis, comprising four peer-reviewed articles, each of which fulfilled a particular aim within the overall study. Two of the four research aims were not defined until a late stage of the research process and their focus was rooted in findings from the literature review and an initial exploration of data. Following the initial exploratory phase, the professional journeys and research lives of PE teacher educators became the central focus. The aims of this study were as follows:

1. To scope the extant literature on PE teacher educators with a view to determining what research questions have been explored to date and where further research on this population may be warranted (Paper I)
2. To inform understandings of how the professional views of PE teacher educators are shaped and whether, to what extent and why, such views change over time (Paper II)
3. To examine the professional journeys of an international group of PE teacher educators to determine what influenced their entry to, and development within, the profession (Paper III)
4. To explore the motives for research engagement and choices of an international group of PE teacher educators, and investigate what challenges and facilitates their research efforts (Paper IV)

3 RESEARCH DESIGN AND METHODOLOGY

3.1 Overall Research Design and Timeline

The design of this study was divided into two phases: An open exploration phase and a focused exploration phase.

3.1.1 Phase 1: Open exploration

The open exploration phase stemmed from a desire to ensure that the research questions examined in the study were worthy of consideration and focused on areas of import that would make a significant contribution to literature and practice. It was decided to fully scope the extant literature on PE teacher educators while simultaneously conducting exploratory semi-structured interviews with an international group of PE teacher educators.

3.1.2 Phase 2: Focused exploration

Building on the findings from the review of literature and the exploratory interviews with PE teacher educators, two interlinked focuses of inquiry emerged: what influenced participants entry to and development within their profession, and what challenged and facilitated their research efforts. These two questions became the central focus of a round of follow-up semi-structured interviews with participants.

An overview of the research design and timeline of the study can be seen in Figure 1.

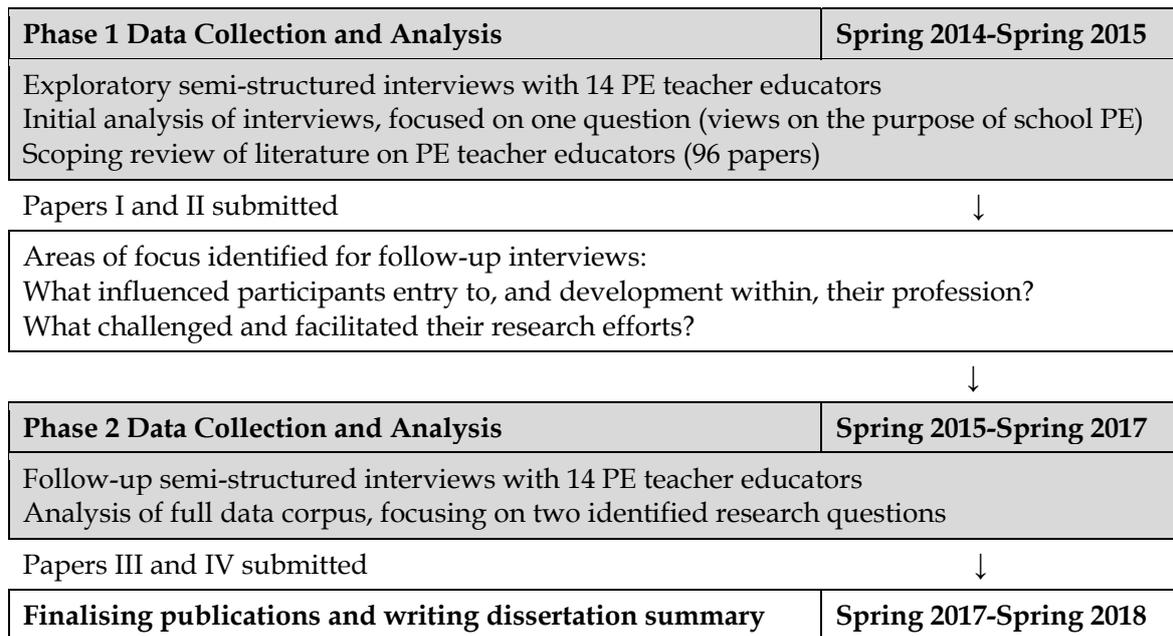


FIGURE 1 Overview of research design and timeline

3.2 Methodological Approach

The methodology for the review of literature is presented in the next chapter. The empirical aspects of the study, which are described here and were the focus of Papers II-IV, were positioned within the social-constructivist paradigm. The intention was to record and examine the voiced experiences of participants and the meanings they attached to such experiences.

3.3 Methods

3.3.1 Participant selection

The selection of participants was influenced by a desire to include those in senior PE teacher education roles in order to investigate their professional journeys and experiences over time. There was also a wish to ensure a geographical spread of participants to allow for a cross section of experiences from different contexts. As the intention was for the final research focus to be rooted in the data and literature review, the selection criteria remained broad. A combination of convenience and purposive sampling was used in the selection of participants (Teddlie & Yu, 2007; Patton, 2002). Participants were selected from among the 53 attendees at an international research seminar on PE teacher education. There were three selection criteria: (i) contributing to the education

of post-primary PE teachers, (ii) holding a senior position in a given faculty (at least senior lecturer or equivalent), and (iii) having at least five years of experience as a PE teacher educator¹ in higher education, with at least 10 years of professional experience in the field of PE. Although it was not the initial intention of the study to focus on the research lives of participants, the sampling frame did admit a degree of bias in that those who chose to register for the seminar could be confidently described as research-active. This research interest may be more pronounced in this sampling frame than among the general population of PE teacher educators.

In prioritising the geographical spread of participants, it was decided not to have more than four participants from any one country. Because eight participants from one country met the selection criteria, four of these were selected for participation based on obtaining a range and depth of professional experience to inform the research. Of the 15 PE teacher educators who met the selection criteria and who were invited to participate, all but one agreed.

Among the final 14 participants (seven male, seven female), at the time of initial data collection, seven held the job title of professor, the job title of one was assistant professor and six worked under the title of senior lecturer. It is acknowledged that these titles encompass different responsibilities in different countries, but the data demonstrated that all participants had a wealth of relevant experience through which to inform the study. Participants were based in seven countries: Belgium, Finland, Germany, Ireland, New Zealand, Switzerland and the USA and had an average of 20 years of experience as PE teacher educators, ranging from 6 to 38 years. Pseudonyms are used in the presentation of findings. An overview of the participants is presented in Table 1.

TABLE 1 Overview of study participants

Pseudonym	Sex	Country	Years in PE teacher education
Lars	M	Belgium	32
Elina	F	Finland	32
Hanna	F	Finland	15
Jenni	F	Finland	10
Mikko	M	Finland	12
Andreas	M	Germany	14
Karl	M	Germany	38
Cathy	F	Ireland	33
Sara	F	Ireland	11

¹ Given the many ways in which teacher educators are defined (Livingston, 2014), it should be clarified that in this study teacher educators are defined as those educators based in higher education institutions who educate, and support the ongoing professional development of, future and practicing teachers.

Jane	F	New Zealand	18
Olivia	F	New Zealand	8
Max	M	Switzerland	27
Ian	M	USA	34
Josh	M	USA	6

3.3.2 Interviews

Data collection involved two rounds of individual in-depth semi-structured interviews. One participant chose to provide responses to questions from the initial interview in written form and another did so for the follow-up interview. These written responses were added to the interview transcripts before analysis. Of the 26 interviews conducted orally, 9 were conducted in person at a location convenient to the participant (e.g. in an office or a quiet location at a conference) and the remaining 17 took place via Skype. Interview durations averaged 85 minutes (an average of 68 minutes for the initial interviews and an average of 101 minutes for the follow-up interviews). The initial interviews were exploratory, centring on gaining a general sense of participants' professional pathways, their views on their subject and their experiences as teacher educators. The follow-up interviews, which took place approximately one year later, tracked participants' professional journeys in more detail and included questions related to how and why they engaged in research throughout their careers and the place of research in their working lives. Interview schedules for the initial and follow-up interviews can be found in Appendix A.

Following the initial interview, each participant also provided a copy of his/her curriculum vitae. This was useful both in confirming general details provided in the initial interview and as a prompt in examining professional journeys and research lives in more depth in the follow-up interview.

3.3.3 Data analysis

The overall data corpus for this research consisted of 36 hours and 51 minutes of audio recordings as well as the two interview responses submitted in written form. When all audios were transcribed, this represented 745 pages of data (299,533 words). Table 2 provides an overview of the data that was to be analysed.

TABLE 2 Overview of data collected

Interview Phase	Overall Duration	Average Duration	Interview Format
Initial	14 hrs 52 mins	68 mins	8 Skype, 5 in person, 1 written
Follow-up	21 hrs 59 mins	101 mins	9 Skype, 4 in person, 1 written
Overall	36 hrs 51 mins	85 mins	17 Skype, 9 in person, 2 written

The analysis of this data was a process which evolved throughout the study. The participants spoke in detail about their lived experiences as they recalled them. The recalling and telling of these lived experiences were, however, necessarily filtered through memory, the social construction of experiences by participants over time, and the social construction of experiences within the interview context. Following from this, participants' accounts were then analysed and interpreted, adding another layer of subjectivity. The second and third author of each paper acted as critical friends, encouraging reflexivity and challenging assumptions. It is acknowledged that the social reality of another cannot be objectively accessed and known (Smith & McGannon, 2017). The intention, rather, was to present the themes and patterns identified in the process of data analysis, while acknowledging that other themes and interpretations also exist.

A descriptive approach was taken to the analysis of data (Silverman, 2013). The analysis was conducted in two phases. The first phase involved the analysis of the initial interviews, with a view to responding to one research question (Paper II) and also gaining a sense of the participants, the data and what questions might be worth focusing on in the follow-up interviews. The second phase of data analysis involved the analysis of the data from both initial and follow-up interviews, focusing mainly on two data sets, one pertaining to each research question. Although the data sets differed somewhat, the data analysis in Phase 1 and Phase 2 were broadly similar, following a number of stages. These stages were designed following consideration of various analytical approaches, including the open, axial and selective coding used in Grounded Theory (Straus & Corbin, 1998) and the six-phase analytical approach of Thematic Analysis (Braun & Clarke, 2006). Although neither these nor other approaches were followed explicitly, the basic tenets of analysis in each approach were helpful in providing guidance for the data analysis. In analysing the data, the researcher wished to sort the data in ways which brought a clearer picture of what the participants' experiences relayed in relation to specific topics. However, it was further desired to retain the contextual surroundings of the data as far as possible during this sorting exercise.

The first stage of analysis involved emersion in the data. The audios from all interviews were listened to, to ensure familiarity with the overall narratives shared by participants. Brief one/two-page summaries of participants were created after the initial interviews and were supplemented with further detail from the follow-up interviews. These served as an aid in retaining the whole picture of each participant as the data analysis continued. The second stage of analysis involved exporting the full data corpus to Excel where it was divided into meaning units, defined as ‘parts of the data that even if standing out of the context, would communicate sufficient information to provide a piece of meaning to the reader’ (Elliott & Timulak, 2005, 153). Meaning units were created by reading carefully through the data and as each new thought/piece of narrative was shared, a new unit was begun. In all, the data was divided into 2012 meaning units (916 from the initial interviews and 1096 from the follow-up interviews). The units were kept relatively large (approximately 150 words on average) so that the data did not become too fragmented and the clarity of the contextual meaning was retained.

The researcher determined that it was preferable to keep the data together in larger units and spend time reading and re-reading the units rather than breaking the data up into smaller pieces and coding multiple times. As each meaning unit was created, it was assigned to the ‘domain’ to which it pertained (Elliott & Timulak, 2005, 154). The five core domains to which meaning units were categorised can be found in Table 3. Meaning units were often categorised within a number of domains, such that there was considerable data overlap between the domains. Again, the preference was to read the same unit multiple times to increase familiarity with the data rather than create a larger number of codes and have the data more fragmented.

TABLE 3 Core domains into which data units were categorised

Domain	Number of Meaning Units		
	Initial Interviews	Follow-up Interviews	Total
Research	198	876	1074
Professional journeys	357	575	932
Professional contexts	483	330	813
Role, responsibilities, experiences	293	469	762
Professional views	267	87	354

The next stage of data analysis for each paper involved coding the meaning units within each domain. Within each domain, units were coded through a constant comparison of meaning units until all the data was sorted (Rubin & Rubin, 1995). Paper II focused on the views of participants regarding their subject matter and relied solely on the data from initial interviews. Codes under the domain ‘professional views’ were the most pertinent, and these codes, such

as 'purpose', 'holistic', 'health', 'sport', 'obesity', 'physical activity', 'learning', 'changes in views', 'roots of views' and 'influence on views', were integrated with other domains and codes, such as the codes 'societal context', 'institutional context', 'educational context', 'colleagues' and 'expectations' under the 'professional context' domain, and the codes 'influence of' and 'interaction with' under the 'research' domain. In a similar way, Paper III focused mainly on data within the 'professional journey' domain. This constituted data from both the initial and follow-up interviews. Similarly, Paper IV focused mainly on data within the 'research' domain, which constituted data from both the initial and follow-up interviews. The final stage involved looking across codes to identify themes which were common and provided insight into the given question.

3.4 Trustworthiness of the Data

During coding, efforts were made to identify and carefully consider any negative cases (Lincoln & Guba, 1985). Other strategies suggested by Lincoln and Guba (1985) were also employed to improve the trustworthiness of the findings. Each participant received a copy of his/her transcription and was encouraged to clarify or comment on any aspects of the data. While data collection and analysis were carried out by the main researcher, the second and third authors of the papers were available for debriefing, which allowed for the discussion of emerging codes and hypotheses. Additionally, the main researcher took reflective fieldnotes throughout the research process in which she recorded thoughts, assumptions and possible biases so that these could be confronted during the analysis of data (Bogdan & Biklen, 2003).

3.5 Ethical Considerations

Guillemin and Gillam distinguish between (i) procedural ethics, the ethical rules and guidelines monitored and approved by institutional review boards; and (ii) ethics in practice, 'the everyday ethical issues that arise in the doing of research' (2004, 263). This is an important distinction in ensuring that the essence of research ethics principles carry through to 'the uncomfortable realities of doing engaged qualitative research' (Pillow, 2013, 193).

The ethics procedures observed for this thesis included applying for ethics approval from both the University of Jyväskylä and the University of Limerick. An informed consent form was given to each participant in advance of the initial interview. This gave details on the purpose of the study, the nature of the requested participation, the right to withdraw at any time without explanation and how data would be handled and stored. Participants were given the opportunity to ask any questions prior to the beginning of data collection. In

addition, participants were sent the interview schedules in advance so that they could query any topic or choose not to respond to any question if they so wished. It was cautioned that, although data would be anonymised and the identity of participants would not be shared, it was possible that someone who knew a participant well could, on reading a quote or anecdote, recognise the participant. No participant expressed concern regarding this. The choice to send each participant their interview transcripts prior to data analysis and encourage them to comment or suggest edits to the data also allowed the principle of consent to carry through past the data collection phase and give participants a sense of ownership of their own data.

Every effort was also made to translate procedural ethics into ethics in practice. The principle of informed consent was reinforced at various times throughout the data collection processes. Participants were reminded at the beginning of each interview of their right to withdraw at any point without explanation. Further, if interviews led to recollection of events or situations that appeared in any way to make participants uncomfortable in speaking about or recalling them, they were given the opportunity to change topic or end the interview. There were a few occasions where participants asked, before sharing an experience that they felt was pertinent for context, that the experience not be transcribed or included in the data analysis and this was respected in all cases. These moments represented 'ethically important moments' in the research process (Guillemin & Gillam, 2004, 262). Kvale and Brinkmann call 'the intellectual virtue of recognising and responding to what is most important in a situation' situated judgement (2009, 61). It was important for the researcher to be prepared for ethically important moments and to have thought through her stance on research ethics prior to data collection in order to be ready to display sound situated judgement in moments of ethical import (McEvoy, Enright & MacPhail, 2015).

3.6 Delimitations and Limitations

As with any study, decisions were made during this research which should be brought to the attention of the reader so that the boundaries and limits of this study can be clarified.

Although this study is international in the sense that its participants are based in various countries, it is not a comparative study and the participants do not claim to represent the totality of views or experiences from their respective countries. Rather, the intention was to explore individual perspectives in a variety of contexts.

The limited number of participants in this study suggests that any generalisations to the larger population of PE teacher educators should be made with caution. This study aims to provide insights into the careers, perspectives and experiences of a small group of PE teacher educators. It considers that such insights have value in informing future research and conversations about

practice. However, it does not suggest that the findings should form a basis for action in or of themselves.

It is acknowledged that there are various disciplinary relationships related to PE teacher education across contexts which continue to evolve, be defined, and become re-shaped. For example, the terms sport pedagogy, kinesiology, physical education and sport science take on various meanings depending on context. The degree to which these terms relate to those who teach future teachers of physical education in schools differs across time and context. This study does not enter into this debate. Instead, in discussing PE teacher educators, it aims to be inclusive of all those who are based in higher education and who teach prospective teachers of school PE.

4 CONCEPTS AND THEORIES FRAMING THE PRESENTATION OF FINDINGS

A number of concepts and theories are mentioned in the framing of findings within the published articles summarised in this thesis. The concept of value orientations relates to the beliefs and values underpinning the enactment of participants' professional roles. This concept, along with Occupational Socialisation Theory, which provides a framework for viewing how teacher educators are inducted into their professional roles, was helpful in discussing the professional beliefs of participants. Social Cognitive Career Theory, another useful framework, helped in the interpretation of findings related to the professional journeys of participants. The concept of research affect pertained to participants' underlying feelings about research and was a useful lens through which to view their responses regarding their relationships with research.

4.1 Value Orientations and Occupational Socialisation Theory

PE teachers are understood to undergo a process of occupational socialisation which affects why and how they teach, with a subsequent impact on their students' experiences of PE lessons (Lawson, 1983a, 1983b). The occupational socialisation process described by Lawson sees PE teachers being influenced by significant people in their lives and by personal experiences of sport/physical activity and school PE (a socialisation process known as acculturation), as well as by the PE teacher education programmes in which they are educated (professional socialisation) and the professional contexts within which they work (organisational socialisation).

It has been further acknowledged that this socialisation process results in PE teachers embodying one or more dominant value orientations, described by Gillespie as 'a complex blend of intentions, beliefs and actions in practice [that] provide the lens through which teachers interpret and enact curriculum' (2011, 59). Jewett, Bain, & Ennis (1995) categorised these value orientations as

discipline mastery (focused on skill acquisition and performance), learning process (focused on learning to learn), self-actualisation (focused on personal growth), social responsibility (focused on helping students align their individual needs with the needs of society) and ecological integration (a balanced focus on the learner, the subject matter, the educational context, and social concerns).

Teachers' beliefs and value orientations have been the focus of much research and have been acknowledged as one of the keys to understanding and improving school PE practice (Chen & Ennis, 1996; Ennis, 1992; Jewett et al., 1995; Tsangaridou, 2006). The value orientations and socialisation literature provides much information and context for how the views of PE teachers on their subject matter may be formed and influenced. Less is known, however, about the formation and alteration of views of PE teacher educators on their subject matter. Certainly, this literature also applies to the majority of PE teacher educators. They also go through the socialisation processes described by Lawson and they too form value orientations which influence their views and practices. However, much literature stops short of following the evolution of the views of PE professionals past their time as pre-service and in-service teachers into their roles as teacher educators.

Sofo & Curtner-Smith (2010) remind us that value orientations act as mediators for the degree to which ideas espoused by PE teacher education programmes are accepted or rejected by pre-service teachers. These authors further explain that while most PE teacher education programmes appear to have little impact on the value orientations of pre-service teachers, and some even reinforce faulty beliefs, those programmes that have demonstrated a positive impact on the value orientations of pre-service teachers share common characteristics. Among these are the beliefs and practices enacted by PE teacher educators. Acknowledging PE teacher education as a context and culture in which the value orientations of pre-service teachers are particularly resistant to change, Gillespie's study of the value orientations of practicing teachers (2011) suggests that PE teacher educators can be instrumental in influencing the value orientations of pre-service teachers.

In discussing participants' views on the purpose of school PE (Paper II), Occupational Socialisation Theory and the concept of value orientations were helpful in understanding how views on purpose can be framed and in discussing how the articulation of PE teacher educators' experiences of changing or resistant views may be beneficial for the professional development of pre-service teachers.

4.2 Social Cognitive Career Theory

To assist in the elucidation of data related to the professional journeys of participants, Social Cognitive Career Theory (SCCT) (Lent, Brown, & Hackett,

1994; 2000; 2002) is employed as a helpful conceptual framework in stretching thinking regarding this topic. This theory is rooted in social cognitive theory (Bandura, 1986) and emphasizes cognitive-person variables that enable people to influence their own career development, as well as contextual variables that enhance or constrain personal agency.

There are three interlocking models within SCCT; career interest, career choice and career performance. All highlight the mediating effect of self-efficacy beliefs, outcome expectations and goal representations on career development. The interest model in SCCT specifies that individuals are likely to develop interest in activities in which they feel efficacious and from which they anticipate that there would be positive outcomes. The choice model views the development of career goals and choices as functions of the interaction between self-efficacy, outcome expectations and interest over time. Career choice is seen as a dynamic process in which the person and his/her environment mutually influence each other. An 'ability' factor, framed by one's achievement, aptitude, and past performance, is highlighted in the performance model. Ability serves as feedback from reality to inform one's self-efficacy and outcome expectation, which in turn influences performance goals and levels. Although SCCT can be viewed as somewhat linear (with the interest model applying to a person prior to beginning a career, the choice model applying to the choice of career and the performance model affecting the in-career years), Lent et al. (1994) do indicate that the models can repeat throughout a person's lifespan. In the case of PE teacher educators, the theory might best be seen as representing a spiral, the different stages of which feed forward to further iterations of the interest, choice and performance models. PE teacher educators often initially develop an interest in becoming a teacher of PE in school. However, after they experience the first cycle of developing interest, making the choice to enrol in an undergraduate degree and reflecting on their performance (either as a student in higher education or, in some cases, as teachers in school), they then develop subsequent interest in becoming teacher educators/academics and make subsequent career choices which result in new performances to be reflected upon.

Social Cognitive Career Theory was a helpful interpretive lens in discussing findings regarding the professional journeys of PE teacher educators (Paper III).

4.3 Researcher Affect

The concept of researcher affect, introduced by Åkerlind, stemmed from a study which went beyond exploring understandings of 'research' to considering understandings of 'being a researcher' (Åkerlind, 2008, 17). Merging her findings from both a review of literature and an empirical study of academics' experiences as researchers, Åkerlind identified five aspects of the range of variation in ways of experiencing being a university researcher:

researcher intentions, research process, anticipated outcomes, object of study, and underlying feelings. The fifth aspect, underlying feelings, which she termed 'researcher affect', was not found in the literature previously.

This novel, accessible concept, although not examined deeply in the literature, became a key to unlocking insights regarding patterns in the relationship between the feelings participants in this study associated with research and their original motivations for embarking on such research. The concept of researcher affect thus became useful in framing findings from Paper IV in the current study.

5 SCOPING REVIEW OF LITERATURE ON PE TEACHER EDUCATORS (PAPER I)

In preliminary searches of the literature for this study, it was found that many articles on PE teacher educators began by highlighting the paucity of research on the population. It was clear, however, that the years since Lawson's initial research impetus had witnessed an increase in research focused on PE teacher educators. Scholars continued to seek out and respond to new research questions in order to illuminate the professional worlds of PE teacher educators. There had not, however, been any comprehensive review of this body of research. Working on the premise that researchers should build on prior research as an essential strategy in the strengthening of the base of knowledge in teacher education (Cochran-Smith & Zeichner, 2005), it was decided to take a systematic approach to the review of literature on PE teacher educators before finalising the focus of the current study.

The purpose of this paper was to review research carried out on, with and by PE teacher educators in the period 1990-2014, and identify areas where research was lacking, in order to provide a useful context for the design and conduct of future scholarly inquiry on PE teacher educators. For the particular purposes of this study, a further aim was to provide an evidence-based narrowing of focus for the research from a general interest in the professional lives and careers of PE teacher educators to questions considered useful to furthering scholarship in the area.

Unlike researchers carrying out a traditional systematic review, the intent in this study was less to find the answer to a specific question about a population (in this case PE teacher educators) and more to determine what questions had been asked so far, how such questions had been asked and to what end. Arskey and O'Malley (2005) explain that the most common type of systematic review aims to answer a well-defined question by synthesising data from a relatively narrow range of quality-assessed studies. In a typical systematic review, the findings of various studies, which are viewed to be of similar quality and to have explored the same issue in the same way, are aggregated to result in a stronger overall conclusion. In the case of this review,

however, a different form of aggregation was sought, more akin to the way in which pieces of a jigsaw puzzle fit together. Each study represents a different piece, uniquely shaped and having its own place in the overall puzzle. With the addition of each piece the picture becomes clearer. A different form of review, a scoping review of literature, was therefore deemed the appropriate choice for the purposes of this study.

The scoping review, which also takes a systematic approach, provides a 'snapshot of a particular topic area' (Booth, Papaioannou, & Sutton, 2012, 19). Anderson, Allen, Peckham, and Goodwin (2008) describe scoping studies as ranging from general accounts of the literature to papers that are just short of systematic reviews. The aim in this study was to locate this review at the latter end of this spectrum. The most significant departure a scoping review takes from the systematic review outlined above is that a scoping review does not include an assessment of research quality. This is not to say that its reviewers do not value research quality, rather the purpose is one of charting, not evaluating.

5.1 Review Process

The broad research question framing the review was, 'What peer-reviewed PE teacher educator data was published from 1990 to 2014?' The review did not include studies published online prior to an official publication date after 2014 and it was limited to peer-reviewed articles published in English during the 25-year period from January 1st 1990 to December 31st 2014. The start date of January 1st 1990 was chosen based on an assessment, following an initial scan of the literature, that this was the year when research on this population began to emerge with some frequency. Articles in languages other than English were excluded due to the cost and time involved in translating articles. While it is acknowledged that these choices limit the results, such limitations were necessary to ensure the completion of the review in a timely manner.

Following this broad research question, it was decided that papers would be included if: (i) they contained PE teacher educator data, (ii) the methods used to collect such data were specified, (iii) the data added to our knowledge of PE teacher educators, and (iv) the data was clearly distinguished from those of any other study participant(s). The term 'PE teacher educator data' was the root of considerable discussion because, depending on your epistemological perspective, many commentaries and non-empirical articles written by PE teacher educators could be considered data in themselves. In order to ensure the review did not become untenable, however, it was determined to only include those studies in which data collection methods were outlined, or at the very least specified. Further, it was decided that if two or more articles meeting the inclusion criteria were derived from the same data set both articles would be included.

In line with the scoping review guidelines offered by various authors (Anderson, Allen, Peckham, & Goodwin, 2008; Arskey & O'Malley, 2005; Colquhoun et al., 2014; Levac, Colquhoun, & O'Brien, 2010), a number of steps were employed in identifying articles for review: (i) a search of electronic databases, (ii) a manual search of key journals, and (iii) a search of reference lists of studies deemed of potential relevance.

Four databases were identified as those most relevant to the research topic: Academic Search Elite, ERIC, SportDiscus and Web of Science. After some initial trials of different search terms, the following search terms were subsequently selected and entered into each database: 'physical education', 'PE', 'PETE', 'teacher educators', 'faculty' and 'lecturers'. A total of 1,458 articles were identified through this initial database search, from which 206 duplicates were removed. The titles and abstracts of the remaining 1,252 articles were then screened for relevance. In total, 1,008 articles were categorized as irrelevant (beyond the scope of the review), resulting in 244 articles being categorised as potentially relevant after this first stage of the search. These 244 articles were then retrieved and read in full as a final screening step, resulting in the exclusion of a further 174 articles.

Following the initial database search, a subsequent manual search was carried out, within the specified publication period, of those journals from which more than three articles had been categorised as relevant. Arskey and O'Malley (2005) suggest that this step can help to identify articles that may have been missed in the database searches. The full text of any article deemed of potential relevance was read and the article included/excluded accordingly. This additional step resulted in the inclusion of 16 articles. One final endeavour undertaken to ensure all relevant studies were identified was a search of the reference lists of those papers categorised as potentially relevant in the database search ($n = 244$) and those papers identified during the manual search of journals ($n = 16$). This reference list search resulted in the inclusion of two new articles.

Because the initial database search was carried out in August 2014, a separate search was necessary in March 2015 in order to identify relevant studies published between July and December of 2014. The steps followed in the initial database search were mirrored in this procedure. This additional search resulted in the inclusion of a further eight articles. The final scoping review included 96 articles. The review process is summarised in Figure 2.

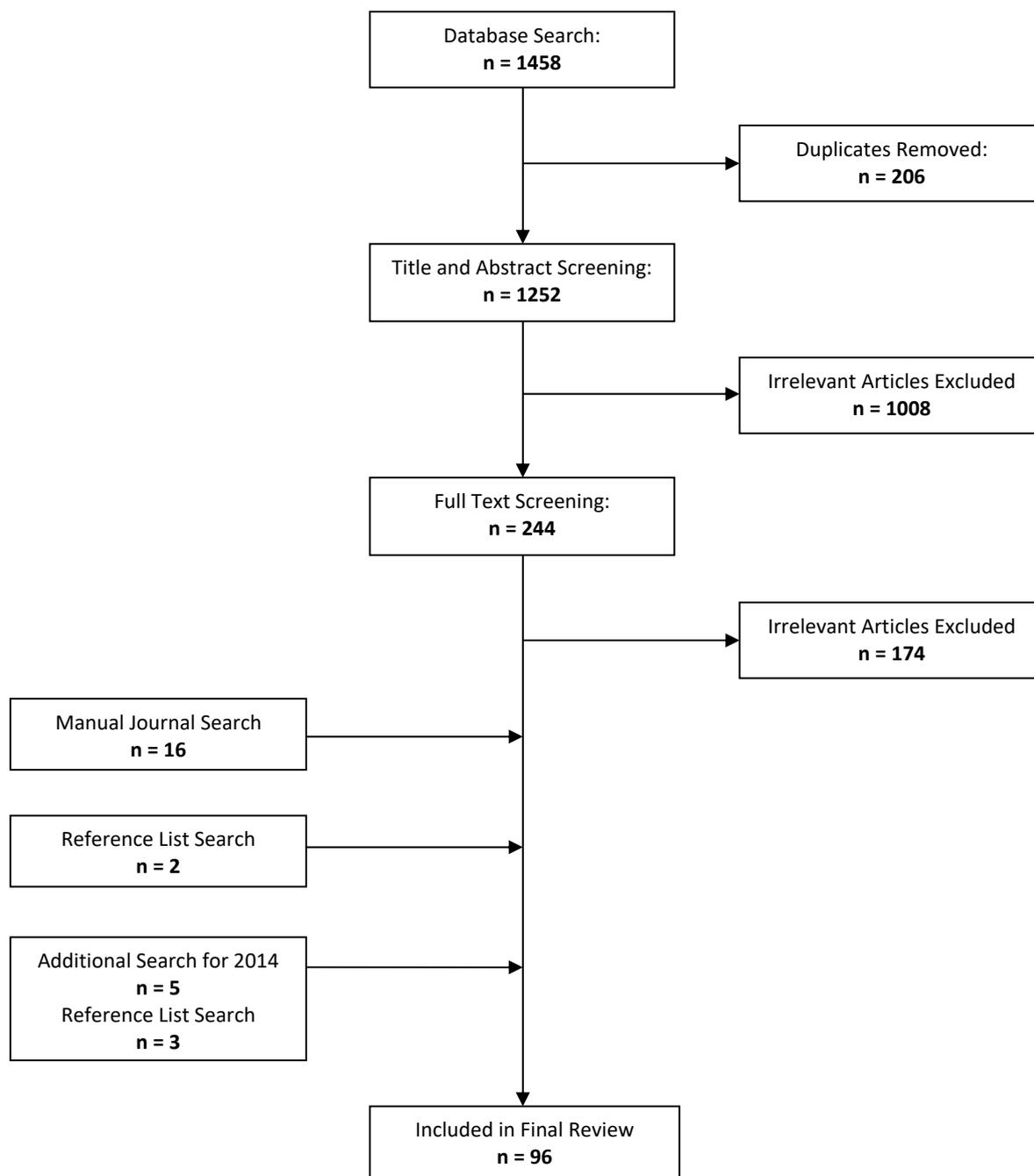


FIGURE 2 Overview of review process

5.2 Review Findings

5.2.1 Descriptive overview

The research informing the 96 included articles was carried out in 15 countries and published across 25 journals. A summary of the numerical, geographical

and journal spread across time can be found in Table 4. The resulting picture reveals two relatively productive decades in terms of research on PE teacher educators, with a decrease in publications during the intervening five-year period, 2000-2004. The ten years since 2005 witnessed a one third higher rate of publication on this population than was seen in the ten years prior to 2000.

TABLE 4 Summary of breakdown of articles, countries and journals during review period

Years	1990-2014	1990-1999	2000-2004	2005-2014
Articles	96	35	4	57
Countries	15	3	2	15
Journals	24	9	3	22

The bias of English language publications notwithstanding, the review demonstrated that there has been a much stronger focus on PE teacher educator research in the US than elsewhere, with many early articles deriving their research questions from the agenda set out by Lawson (1991). With 57 articles overall, the US was by far the most represented country, followed by Australia, New Zealand and Great Britain with seven articles each. Research interest in this population in other countries has been recent (all but five non-US studies were published since 2005). Overall, PE teacher educators have become a feature of research in an increasing number of countries over time, spreading from three to 15 countries during the last ten years. It is difficult to be certain, however, whether this apparent increase in research on PE teacher educators represents an actual increase in the publication of research on this population around the world or merely an increase in such research being published in English. Despite this increase in the number of countries represented, there were just four articles based on research carried out in more than one country. From 1990 to 2004, just four articles were published in journals outside of the field of sport pedagogy and this increased to 18 articles since 2005.

While not all papers included a theoretical framework, the most cited theoretical lens through which results were viewed was Lawson's socialisation theory (1983a, 1983b). The variety of theories utilised expanded in the latter years of the review. PE teacher educators were listed as participants in all but five articles (in these five articles heads of department or representatives of PE teacher education programmes participated, providing data regarding their programmes and faculty). In the remaining 91 articles, the number of PE teacher educator participants ranged from one to 283, with 31 articles having three or fewer such participants and just 18 articles having more than 30. Interview was by far the most utilised data collection method cited (54 articles). Given that just 18 articles had more than 30 participants, much of what we can assert to know about this population is both context-and subject-specific,

precluding the possibility of making general claims. Outside of North America, little research has been carried out on the PE teacher education profession as a whole, either within or between countries. Practitioner research, referred to by Hamilton, Pinnegar, and Davey as ‘intimate scholarship’ (2016, 181), was shown to be an expanding area of scholarship internationally, with 17 of the 39 non-US articles centred on the professional practice and learning of their authors.

5.2.2 Thematic overview

Table 5 presents a summary of the themes addressed across the reviewed papers and how many papers addressed each topic. Some papers were found to address more than one topic. Further, some papers addressed a topic as a primary focus of the paper while others addressed a topic as a secondary focus.

TABLE 5 Overview of topics addressed by reviewed papers

Theme	... as a primary focus in article	... as a secondary focus in article
Demographics	6	4
Biographies, careers	6	3
Socialisation	7	8
Knowledge/Understanding	14	10
Perspectives	14	3
Professional Contexts	13	10
Role Expectations	5	10
Pedagogy (general)	9	7
Pedagogy of authors	17	-
Working with teachers, schools and communities	14	6
Research (general)	4	6
Research of authors	8	5

5.2.3 Overview of research on the professional journeys and research lives of teacher educators

Yang and Elliott (1999) and Dodds (2005) centred their work on the careers of female PE teacher educators. The former examined the career socialisation of ten female professors of adapted physical education/activity and the latter probed the link between the biographies, careers and socialisation of 54 female PE teacher educators, with a specific focus on participants' experiences of being

mentored as children, adolescents and as teacher educators. Most other studies of the biographies or careers of PE teacher educators focused on just one participant. Life history methodology was employed by Cazers and Curtner-Smith (2013) to provide an in-depth exploration of the biography and career of a retired African American PE teacher education professor, and by Cole and Smith (2014) in their study of a PE teacher educator with an impairment. Both papers discussed the marginalisation and discrimination encountered by these pioneering individuals throughout their personal and professional lives and how they experienced and confronted these issues. Cutforth's (2013) autoethnography of his journey to become a community-engaged scholar provided insight into the career path of one PE teacher education scholar and how he balanced his passion for community engagement and related research with his attempts to secure tenure and satisfy sometimes discrepant institutional demands. The biography of a generalist-trained PE teacher educator and how her students perceived the impact of her teaching were the topic of Graber and Schempp's (2000) study, which illustrated the influential interaction between biography and pedagogy. This interaction was also a focus for McMahon and Huntly (2013) in their presentation of the connection between their past bodily experiences and their present embodied pedagogy. The contribution of McMahon and Huntly was the only non-US article to attend to the biographies of PE teacher educators with none focussing on the career paths of this population.

Connected to the personal and career paths of PE teacher educators is their socialisation into the profession. Many of the articles listed above also focused on the occupational socialisation of their protagonists (Cazers & Curtner-Smith, 2013; Cole & Smith, 2014; Cutforth, 2013; Dodds, 2005; Yang & Elliott, 1999). Further, Graber (1993) investigated the occupational socialisation of a group of faculty in a high-impact PE teacher education programme, drawing attention to how faculty consensus was continuously refined, reinforced and maintained. Williamson (1993) described the organisational socialisation experiences of five female PE teacher educators (including herself) in their initial years as assistant professors of PE as they grappled with a sense of role ambiguity and lack of support structures. Mentoring was a subject of interest for Bower (2007) in her examination of the mentoring relationships between heads of department and first-year faculty. Although the data in this article is from the perspective of department heads rather than faculty, data on the participants' past experiences as protégés are linked to their current roles as mentors. The study of Lee and Curtner-Smith (2011) sought to determine the impact of occupational socialisation on the beliefs and practices of 12 sport pedagogy doctoral students, finding that the students' graduate education had a particularly strong impact on their orientations (participants' career paths were also discussed). This paper was complemented by that of Parker, Sutherland, and Sinclair (2011), who solicited opinions of the PE teacher education professoriate regarding how well US PE teacher education doctoral programmes prepare future faculty. Casey and Fletcher (2012) also contributed to this theme through an examination of

their own transitions from teaching, through doctoral studies, to teacher education. The socialisation of doctoral students and early career PE teacher educators was also a focus, albeit tangential, in other articles (Fletcher & Bullock, 2012; Fletcher & Casey, 2014; Ward Parker, Sutherland, & Sinclair, 2011; Williamson & Stroot, 1994).

What is known about how and why PE teacher educators engage in research is largely due to the work of Mitchell (1992a; 1992b; 1997). This author first traced the academic genealogy of a number of major contributors to the *Journal of Teaching in Physical Education* (1992a) before investigating the scholarly behaviours of PE methods teacher educators in Ohio, probing their reading, writing, attendance at professional conferences and involvement in research (1992b). Returning to the participants of the first study, he then interviewed the most prolific publishers among them to determine what motivated, helped and hindered their publication endeavours (1997). Beyond these papers, there were no articles in the review explicitly focused on the research practices of PE teacher educators in general. The assessment of Silverman, Hodges Kulinna, and Philips (2014) of PE teacher educators' knowledge and perception of academic journals certainly pertains to the scholarly aspect of the population, and among some studies there were references to publication rates and institutional expectations regarding research outputs (Goc Karp, Williamson, & Shifflett, 1996; Hetland & Strand, 2012; Macdonald, 1993; Shehu, 2009; Woods, Philips, & Carlisle, 1997; Williamson, 1990). However, no studies centred solely on the research work of PE teacher educators for close to 20 years.

The difficulty of this relative absence of general data about PE teacher educators as researchers was somewhat assuaged by a number of articles written by PE teacher educators in which they included an elaboration on the effects and experiences of their own participation in research, whether such research was focused on their own practices and experiences (Bruce, 2013; Cutforth, 2013; Fletcher & Casey, 2014; Legge, 2014; Williamson & Stroot, 1994) or collaborative projects with others (Patton et al., 2005; Rovegno & Bandhauer, 1998; Webb & Scoular, 2011). Authors such as Casey and Fletcher (2012), Fletcher and Bullock (2012), Garbett and Ovens (2012), Gubacs-Collins (2007) and Pearson (2011) further contributed to this theme, although less explicitly, through their inclusion, in their pedagogy-focused articles, of insights regarding the professional benefits of participating in self-study or action research.

5.2.4 Overall conclusions from the review

While a wealth of data has been collected on US PE teacher educators, a number of themes have received little attention elsewhere. Little is known about the demographic make-up, biographies, careers, socialisation, or work roles of PE teacher educators beyond North America. Research into the knowledge, understanding and perspectives of PE teacher educators enjoyed a more

balanced geographical representation, as did scholarship on the pedagogical practices of this population and their work with in-service teachers and schools. Their community work, on the other hand, was less represented among the included articles. Although the context within which PE teacher educators work was a focus in a number of articles, more pointed explorations of the interaction between PE teacher educators and these contexts, and indeed, wider policy and education contexts, may improve understanding of the networks of influence PE teacher educators work within, co-construct or navigate, and how these networks affect their professional practice. Of the research foci suggested by Lawson (1991), one that received scant attention in the included literature was that of the paradigmatic and occupational communities to which PE teacher educators belong. Finally, although the literature has captured something of the experiences of PE teacher educators in research projects in which they engaged, and their subsequent professional learning, it has been almost 20 years since research explicitly investigated how, why or to what end PE teacher educators enact the scholarly aspect of their professional work.

5.2.5 Contribution to the thesis

The findings of this review, when added to the findings of the exploration of the initial interviews, examined in the next section, provided possible direction regarding what might be useful to focus on in the follow-up interviews. Given the absence of research on the careers and work lives of PE teacher educators beyond North America, it was decided to further explore this topic in the follow-up interviews. In addition, given the lack of literature interrogating the research worlds of PE teacher educators, which was compounded by findings from the exploration of data from the initial interviews (which will be summarised in the next section), it was decided to focus on the research lives of participants in the follow-up interviews.

The review also served to uncover all research related to PE teacher educators over the preceding 25 years. This provided a literature map which could be referred to as needed as the study progressed.

6 FINDINGS FROM INTERVIEWS WITH PE TEACHER EDUCATORS (PAPERS II-IV)

6.1 PE Teacher Educators' Views Regarding the Purpose(s) of School Physical Education (Paper II)

Discussing values and purpose in teacher education, Hansen (2008, 23) argues that without dialogue on purpose people can become passive and resigned to the status quo and that enquiry into purpose functions to keep the conversation 'vibrant, dynamic and consequential', adding that such dialogue is 'indispensable to the very existence of a sense of purpose'. PE teacher educators are acknowledged to play key roles in the transformation and reproduction of PE work practices and knowledge (Kirk & Macdonald, 2001; Lawson, 1991). In this light, the ends towards which the work of these professionals are directed and the circuits of persuasion within which the goals to which they aspire are formed, influenced, or resist influence, become of import for anyone interested in the practice and outcomes of PE. This paper sought to explore participants' views on the purpose(s) of their subject and gain an understanding of whether, how and why these views have changed over time. There were three main findings from this paper: (i) the shared purpose aspired to by all participants, that of preparing youth for lifelong physical activity; (ii) the agreed boundaries of the subject; and (iii) findings regarding the changing views of participants regarding the purpose(s) of PE.

6.1.1 Same picture, different frames

Despite differing national and institutional contexts, the participants in this study were found to be in agreement on the broad purpose of PE. Their shared view of PE focused on preparing young people to participate fully and meaningfully in their respective movement cultures. As Elina, from Finland,

explained simply, the goal of the subject is 'to support the lifelong physical activity of your students'.

The data revealed that, underlying the overarching purpose of preparing young people for continued meaningful involvement in physical activity, more than one justificatory argument was made for PE. In other words, the way that participants framed the main shared purpose of PE differed somewhat, reflecting a range of perspectives on the value of physical activity. While all rooted the subject in learning, the various contributions such learning was seen to make differed between participants. Some, for example, framed their views within a context of the holistic development of young people: 'I think it's got a huge role in developing the whole person. Having students understand themselves, understand other people, understand the world around them and how all of those things interact and impact on each other' (Olivia, New Zealand). Others framed the purpose in terms of giving students access to a shared culture: 'It's part of our culture...sport is something really fascinating for some people and we should give children the chance to be able to participate' (Andreas, Germany). Physical health and avoiding sedentary lifestyles (not obesity prevention per se) was a frame employed by others.

6.1.2 Boundaries of the subject

In addition to agreement regarding a broad aim of PE being to equip young people for meaningful sustained physical activity participation, the participants voiced aligning opinions concerning what the purpose of PE was not. There was consensus that improving the fitness of young people was not the purview of PE. Josh (USA), for example, explained: 'I don't think physical education is a place where you get kids fit...our place isn't to get kids fit, our place is to teach kids how to become fit and physically active'. Likewise, maximising in-class physical activity levels was not seen as a top priority by any, except insofar as this was a by-product of good teaching. The participants were also in agreement that PE should not be held responsible for reversing rising obesity levels. In a number of cases, when obesity was mentioned, they voiced a preference to see the role of PE as tangentially contributing to a reduction in inactivity levels or sedentariness rather than obesity per se. Combating obesity was not seen as a central goal of PE by any of the participants, although they did feel that the subject could contribute through the achievement of its actual goal of promoting lifelong engagement in meaningful physical activity.

6.1.3 Changing views over time

A tendency towards change was evident in the views of most, although not all, participants in this study. Among those whose views of the purpose(s) of PE had changed, Josh (USA) changed from believing PE should aspire to addressing many goals to believing in a narrower focus for the subject, namely 'to prepare children to be physically active later in life'. Others had broadened their conception of the purpose(s) of PE over time. Jane (New Zealand), for

example, explained that her view has 'become really holistic in terms of understanding that movement, sport, physical activity contributes to not just the individual . . . but also to society'. Karl's view had broadened to include 'a need for the development of social interactive competence due to the impact of the Internet, computer games and social networks, an influence which also has decreased the amount of daily free time play and motor activities' (Karl, Germany). The most commonly mentioned shift was seen among those who had altered their views from a sport/performance orientation to a view of PE's purpose as being to prepare students for physically active lives. Jenni, from Finland, explained that 'nowadays I think that different sports skills are not as important to me as they were, for example, ten years ago'. A minority of participants in this study recorded having always had the same view of the purpose of PE, that of preparing young people for lifelong physical activity.

Overall, sources of influence regarding the altered views of participants on the purpose(s) of PE included personal reflections, time spent in schools with teachers and students, and discussions with colleagues within and outside the PE subject area. Among the most salient themes in this category, however, were findings from research, a responsibility to respond to issues in society and a need to legitimise PE within school and university contexts. Participants frequently prefaced or followed their responses with references to these latter influences.

The participants' own research findings and those of others were commonly cited as reference points for their views on the purpose(s) of PE. Andreas (Germany), for example, explained: 'We know [from research] that we have about eight to fifteen minutes of vigorous physical activity within one lesson, so there is no adaptation possible. So, on one hand there are a lot of people coming from other disciplines telling us what we have to do . . . On the other hand, it could not work.'

Institutional and broader societal contexts were also shown to influence the views of participants. As the needs of society changed, some found themselves responding through a change of focus for the subject. As Max (Switzerland) suggested: 'we shouldn't close our eyes and not look at what happens in society'. Educational contexts were found to be particularly influential regarding the views held by participants and how these views translated into practice. A number of participants commented on the importance of legitimising the place of PE within their respective institutions.

6.1.4 Contribution to the thesis

This paper was the result of an exploration of the data from the initial round of interviews in this study. As such, in addition to presenting findings on the particular topic, the paper and the data exploration which preceded it presented some initial insights into the professional worlds of the study participants and, when wedded to the findings from the review of literature, allowed some possible directions of focus for the follow-up interviews to emerge.

The impact of research and context on the professional views of participants were particularly salient and, given the identified 20-year gap since research had been published on the research lives of PE teacher educators, it was decided that this would be a worthwhile focus for Phase 2 of the study. In addition to completing the exploration of the professional journeys of PE teacher educators, their research journeys also became a core question in the research.

6.2 Professional Journeys of PE Teacher Educators (Paper III)

In the scoping review of literature on PE teacher educators presented in Paper I, echoing the wider literature on teacher educators (Murray, 2016), little research was found to investigate the careers pathways of PE teacher educators beyond the initial career stages. The only identified paper which involved an in-depth exploration of the careers of a group of later-career PE teacher educators was that of Dodds (2005), which looked at the biographies, careers and socialisation of 54 female PE teacher educators in the US, with a specific focus on participants' experiences of being mentored during their careers. Mentors were found to provide support, challenge, exposure to opportunities, and modelling of professional conduct during the participating teacher educators' careers. Responding to this identified gap in the literature, the research presented in this paper explored the professional journeys of study participants, all mid- and late-career PE teacher educators.

In particular, in keeping with the most salient theme identified in the data, the paper focused on the professional relationships formed throughout participants' careers and how these relationships influenced their career pathways. Through the lens of Social Cognitive Career Theory (SCCT, Lent et al. 1994; 2000; 2002), the paper illustrated the influence of professional relationships on: (i) the participants' entry to the teacher education profession, (ii) their key career landmarks, and (iii) their professional learning as teacher educators.

6.2.1 Entry to the profession

While six participants spent several years teaching PE in schools before entering teacher education, the others found themselves taking a relatively direct route from their undergraduate PE degrees to researcher and teacher education positions within universities. For most, their transition into the teacher education profession was eased by pre-existing relationships with staff in higher education. Of the six who were teachers of PE for considerable lengths of time before entering teacher education, all had some prior relationship with those with whom they first worked in teacher education. In many cases, they had built some experience supervising teachers in schools or working on professional development or research with members of faculty. Jane (New

Zealand) explained that ‘There’d been a whole lot of new developments of senior school qualifications in physical education at that time and I was part of that development . . . I guess that [gave me the feeling] that possibly [I] could do it, ‘cause [I] knew some of the people’. Likewise, Josh (USA) explained: I kind of became related with the university, they would send me practicum students . . . I kind of started seeking out opportunities at the university, became affiliated with [name of professor], and it kind of paved the way for me, you know, to move up’. For those who remained in higher education without spending more than a year or two teaching in schools, many had also built relationships with influential faculty early on. Mikko (Finland), for example, described the feeling of being ‘let in’ by a professor: ‘I knew that this [professor], his position, that it was going to open in some years . . . when [the professor], he told me that there is an open position I was thinking that, okay, now they are letting me in’. The data demonstrated that in many cases existing faculty identified promise in the participants when they encountered them and endeavoured to nurture this promise and encourage their continuation towards positions within higher education.

Considering these findings from the perspective of SCCT, there are several interlocking factors at work here. We see in the data the sense of having been selected giving the participants ‘motivation’, making them ‘happy and proud’, that it was ‘okay’ that they enter. It gave them the ‘feeling that I could do it’ or ‘paved the way’. These quotes strongly portray how self-efficacy and outcome expectations, mediated by the relationships formed with key gatekeepers, created or strengthened interest among the participants in entering the teacher education profession. None of the participants foresaw a career in higher education until they were invited and encouraged and their career expectations were altered.

6.2.2 Key career landmarks

When asked to identify landmarks or turning points in their professional journeys, specific achievements, such as attaining a masters or PhD or reaching full professorship, as well as changing from one institution to another, were common and not unexpected responses. In addition, most participants noted as landmarks meeting people who would go on to provide support and mentorship during their careers.

Some of the factors influencing the decisions participants made regarding their careers, such as the decision to do a masters or PhD, to become a teacher educator, to go for promotion or to change institutions, included interest factors such as a desire to do more research or to have a stronger impact on teachers and young people. More practical factors such as family circumstances, a desire for job security or a PhD being a requirement within a position also featured. The impact of professional relationships on the career decisions participants made was also clear in the data. Lars (Belgium), for example, described how his mentor met with him and explained: ‘you are in a very nice position, a very nice

moment and very nice context to get this position and then if you are doing your best you have a chance to . . . have a permanent job for the rest of your life'. Andreas (Germany), on the other hand, was influenced by the advice of his peers: 'they told me that, sure, there are opportunities, but you should look at the conditions, there are non-permanent positions, there are fifty-percent positions and so on, you should think about that'. A number of participants also experienced negative relationships which had direct impacts on their career decisions. Max (Switzerland) gave an example of how having his freedom and autonomy curtailed by a powerful colleague had the effect of motivating him to reach for a higher position where he would have more autonomy and not have this feeling of 'being an employee'.

The examples included in this paper indicated that it is not as simple as supportive relationships leading to career development and unsupportive relationships being career limiting. Rather, as Lent et al. (1994) point out, contextual factors can moderate the relationship between interest and choice and between choice and action.

6.2.3 Professional learning as teacher educators

Lent et al. (1994) emphasise the importance of learning experiences in interaction with personal and contextual factors in guiding career development. Learning experiences are seen to shape outcome expectations and self-efficacy, which in turn affect interests, goals and actions. Whilst much of the professional learning of participants in this study took a self-directed form, many found that their relationships with mentors, colleagues and students were also formative and enhanced their professional learning and understanding of their roles. Olivia (New Zealand), for example, described how she had 'quite a strong sort of group [of] critical friends. And we did chew the fat a lot and challenge each other a lot. So a lot of [professional learning] I guess I did that way'. Because of the somewhat ad-hoc, unplanned way in which some participants' careers developed, they found that they had significant gaps in their professional learning and it was when they formed new relationships later in their careers that they were afforded the opportunity to become learners again and fill these gaps. Sara (Ireland), for example, described the impact on her professional learning when a new colleague joined her department: 'what I've learned from her in relation to professionalism, how to conduct yourself, how not to conduct yourself, how to consider things, the sort of bigger role of being an academic'.

A number of participants, when discussing the various roles they embodied as teacher educators, explained that as they progressed through their careers they gradually took on more administration and leadership positions and this often prevented them spending as much time as they would like conducting their own research and keeping up to date with scholarship. In these cases, many saw their relationships with graduate students as key to maintaining their connection to the scholarly aspect of their roles. As Karl (Germany) explained, he is 'being sort of kept up with research through the students that I am advising'.

6.2.4 Contribution to the thesis

The theme of professional relationships was not one that was anticipated from the outset of this study, nor was it a direct focus of any of the interview questions. Rather, the importance of other people in the professional journeys of PE teacher educators became apparent throughout the analysis process. This paper brought to the fore the influence of professional relationships on the entry to, decisions within and development of participants' professional journeys.

6.3 Research Lives of PE Teacher Educators (Paper IV)

The review of literature mapping empirical research on PE teacher educators from 1990 to 2014 (Paper I) indicated that the focused empirical exploration of the research lives of PE teacher educators witnessed a long hiatus since the work of Mitchell (1992; 1992b; 1997) over two decades ago. Until the current decade, few papers have since contributed to the empirical research base focused on the research worlds of PE teacher educators.

This gap, along with the finding from Paper II that research was impactful on the professional views of participants, prompted a focus in this paper on exploring the research lives of participants. The feelings participants expressed when discussing the research aspect of their working lives, termed 'researcher affect' (Åkerlind, 2008), included frustration, excitement, anger, confidence, pressure, interest, stress, invigoration, tiredness, being energised, regret, enjoyment, worry, motivation, nervousness, happiness, sadness, passion, fascination, satisfaction, pride and inspiration. This range of feelings were associated with various aspects of participants research lives, described in the paper under three headings: (i) research motives and choices, (ii) research barriers, and (iii) research facilitators.

6.3.1 Research motives and choices

A distinction was evident in the data between motives for embarking on different types of research. Participants' reasons for embarking on formal theses and some funded projects were often related to practical and contextual drivers, such as job requirements or a wish for promotion. Their interest in specific research topics and in the research process more generally tended to be characterised by more personal or altruistic motives such as a desire to improve practice, a desire to enhance personal learning, curiosity rooted in a practical experience or previous research finding, or enjoyment of the research process. Following Åkerlind (2008), the data suggested that the underlying feelings participants held about research were strongly linked to their research motives. In discussing institutional pressures to publish and to establish themselves,

feelings tended towards frustration and stress. On the other hand, when describing the research process and conducting research to impact on practice, positive feelings such as enjoyment and passion predominated.

The range of research questions investigated by participants over the years covered a broad spectrum. While all were practicing PE teacher educators, for some their research was focused in areas other than the teaching and learning involved in school PE or PE teacher education, in areas such as physical activity, health and leisure. Motives for choice of research topic were also often split between extrinsic and intrinsic motives. This tension between the two was captured by Andreas (Germany) when describing the effect of gaining more autonomy through gaining permanent status at his institution: 'I was able to focus on the research that I wanted to do, I wasn't afraid any more that I had only that non-permanent position...[it's] an opportunity where you can research what you want and not research what is strategic'. When choosing where to publish research, participants were guided by two main motives: satisfying the common institutional desire for high impact factors and choosing outlets which would allow the research to be shared with the most appropriate audience. Further, it was reported by many that some topics (such as physical activity and health) often lend themselves to journals with higher impact factors, and projects with greater funding, than topics related to pedagogy and that this can make research choices difficult. The resulting challenges for those trying to negotiate sometimes conflicting influences are well reflected by Elina (Finland): 'I don't know if I can explain but [over the years I have been thinking] should I sell my soul to do something that I'm not so interested in but where I could establish my name?'

6.3.2 Research barriers

Among the circumstances seen to obstruct their research endeavours, some participants listed an absence of a research team or network, the difficulty of trying to grapple with the volume of extant literature and pressure to do research at the expense of other aspects of their roles. Time constraints, skills gaps and language issues were the most commonly cited barriers to the research work of participants.

Time was seen to be the main aspect of the research lives of participants which had a largely constraining effect on their research choices, and strongly impacted their underlying feelings. Participants had many demands on their time due to balancing various other commitments related to teaching, administration and leadership. Keeping up to date with research was largely done through communication with colleagues, attendance at conferences and reading the published literature. This latter avenue was also somewhat constrained by time, however. The issue of lack of time to read, expressed by many, was compounded by the rapidly rising number of publications. This lack of adequate time within scheduled working hours to fulfil all requirements of the role also impacted upon the nature and experience of research activities undertaken, as Olivia (New Zealand) explained: 'When you're jumping out of

teaching and you've only got a couple of hours here or a couple of hours there to work on your research or your writing, it's too haphazard for me.' In keeping with the typical working hours experienced by academics across European countries (European Commission, 2017), this balancing of roles resulted in participants working an average of 55 hours per week. The range of hours spanned 35–90 hours per week, depending on the participant and the time of year. Because many were in senior administrative roles, other high-responsibility duties often overtook the time allocated for research, resulting in this aspect of their roles often being described as 'squeezed in' or occurring outside of scheduled working hours.

The organic, self-directed nature of their development as researchers did sometimes leave gaps in participants' research skills, which some acknowledged as a barrier. Max (Switzerland), for example, shared: 'I was never an expert in empirically-oriented research. But I always knew that I should be, you know? That always put me under pressure, but I couldn't do everything.' This and other similar reflections betrayed the sense that learning research skills was an ongoing effort for participants and it was possible to be an expert in some aspects of their roles and a novice in others. The absence of certain skills was associated with feelings of inadequacy among some and it was not until later in their careers, when they had the opportunity to work in teams and came into contact with graduate students or younger colleagues, that their skills gaps were often filled.

Language was mentioned mainly by participants who did not speak English on a daily basis. They expressed frustration with two language-related issues: (i) the fact that most high-impact journals are published in English, which requires those for whom English was not their first language to expend significant extra effort and time to translate concepts and findings accurately while meeting the same publication timelines and standards, and (ii) the fact that much research published in languages other than English goes largely unnoticed by those who do not speak the given language(s). This results in research often being conducted and published without an awareness of pre-existing research on the same topic which could have either informed or negated the need for such research.

6.3.3 Research facilitators

Among the facilitators to their research endeavours, participants listed effective graduate programmes, guidance by mentors in early years, funding, the freedom that comes with being in a senior position in later years, and working in an environment where research is respected. Personal characteristics such as a natural curiosity, being self-directed, a propensity for hard work and an openness to other ideas and to being challenged were also noted as facilitators. Learning through doing, seeing and reading research, and collaboration with others were the two main facilitators of participants' research endeavours. As Jane (New Zealand) explained: 'There is nothing like actually doing the

research yourself for understanding, as you will know, what you learn from going through that process, it's just huge, isn't it? Understanding the confusion, the trying to find the meaning of things.' Collaboration was discussed among participants in terms of working with graduate students and other research team members, and collaborating with networks nationally and internationally.

The barriers to research encountered by participants, such as time, skills and language constraints, were somewhat counterbalanced by research facilitators. Collaborating in a research team was seen as effective in allowing researchers to complement each other's skills and fill any identified gaps in experience or knowledge. Elina (Finland) suggested that 'the only way you can, I think, get your research to go further [is] you need to have international contacts, especially if you are non-native speakers'. Here, she suggested collaborating with other researchers internationally as a key enabler. Research assistants (often graduate students) were seen as particularly helpful in filling skills gaps, sharing the research workload and easing pressure rooted in time constraints. A number of participants, such as Max (Switzerland), expressed the positive effects of eventually being in a position to hire an assistant: 'I could read more literature, I had more time for that. I could deal a little bit with research methods...We had to share our competencies and so on. But I felt that I had more time.' As mentioned in the previous section, as participants progressed through their careers and became more involved in leadership and administration duties, it was their work with graduate students which often kept them involved and up to date with research.

6.3.4 Contribution to the thesis

This paper carried through the theme of influential professional relationships, evident in Paper II, as well as giving insights into the motivations, choices, barriers and facilitators characterising the research worlds of the study participants. The paper provided a sense of the underlying feelings PE teacher educators have about their research work and how these feelings sometimes reflect the degree to which research contexts and imperatives cohere with individual interests or values. These underlying feelings were also helpful in illustrating the lived effects of research barriers and facilitators. The paper was helpful in indicating how time, skills and language issues can constrain the research work of PE teacher educators, while collegial support can sometimes alleviate such issues.

7 DISCUSSION AND IMPLICATIONS OF FINDINGS

This study sought to examine the literature on PE teacher educators and explore the perspectives and experiences of an international group of mid- and late-career PE teacher educators, with a particular focus on their career pathways and the role of research in their professional lives. In realising the aims of the study, a number of insights have been gained which may inform future research on PE teacher educators and may be helpful in considering how best to support them in their roles. These insights focus on: the current landscape of research on PE teacher educators and gaps identified; influences that can act on the nature and evolution of the professional views of PE teacher educators; the impact professional relationships can have on the career pathways, professional development and professional learning of PE teacher educators; and the underlying feelings PE teacher educators can have about research, as well as what can hinder or facilitate their research efforts. Key insights from this study are now discussed, with reference to related literature.

7.1 Research on PE Teacher Educators

Echoing the extant teacher education literature, the scoping review of literature presented in Paper I indicated that most research on PE teacher educators has been small-scale and practice-based. Murray reiterates the point made by Cochran-Smith and Zeichner (2005) that, although there is great value in small-scale context-specific research on teacher educators, it is difficult to achieve a capacity for impact on teacher education without a coherent accumulation of research. Just as large-scale demographic studies of teacher educators have 'fallen out of research fashion' in teacher education literature (Murray, 2016, 45), the scoping review in this study demonstrated that there have been few large-scale studies of PE teacher educators in recent decades. Such large-scale studies could inform support and professional development initiatives for PE

teacher educators. More longitudinal, large-scale and international studies would be especially welcome. An excellent example of a recent large-scale international study is the work of Enright and colleagues (Enright, Alfrey, & Rynne, 2017). Their study was innovative, seeing a group of 11 professors openly provide advice in response to composite narratives reflecting the lived experiences of the joys, challenges and questions of 30 early career academics across nine countries in the field of sport pedagogy.

Further, co-ordinated efforts by those PE teacher educators involved in practitioner inquiry could allow individual PE teacher educators interested in a particular theme or area of practice to engage in an agreed form of practitioner inquiry. This would facilitate the professional learning and improved practice of the involved PE teacher educators while simultaneously contributing to an eventual synthesis of findings. Such co-ordinated efforts are already evident among some groups of PE teacher educators. For example, the work of Casey and Fletcher (2017) has tracked their journeys from early- to mid-career PE teacher educators through self-study. Similarly, Fletcher and colleagues have begun a systematic exploration of learning about meaningful PE (LAMPE), which had its roots in shared experience of practitioner research. They are building a focused knowledge base through collective practitioner enquiry (Fletcher, Ní Chróinín, & O'Sullivan, 2018).

The scoping review of literature included in this study has already had a noticeable impact on literature in the field. Since its publication, it has prompted the publication of three more scoping reviews across the broad area of sport pedagogy (Richards, Washburn, Carson, & Hemphill, 2017; Robinson, 2018; Robinson, Berg & Gleddie, 2018). The gaps in the literature highlighted by the review findings have also lead researchers to attend to specific topics with a number of publications citing the review as shaping the choice of focus (Berei, et al., 2017; Casey & Fletcher, 2017; Hordvik, MacPhail, & Ronglan, 2017; Patton, & Parker, 2017; Richards, et al., 2017; Russell, Lux Gaudreault, & Richards, 2016). This demonstrates that the completion of the review provided both a methodological template for others wishing to map literature in the field and an overview of research on PE teacher educators which allowed others to see where further research on this population might be warranted. It is hoped that the gaps identified in the scoping review will continue to be examined and addressed, where appropriate.

7.2 Evolution of Professional Views

As Paper II revealed, the participants in this study entered PE teacher education with various sporting, education and health views and for many, although not all, these views underwent a process of change. Influences on their views included findings from research and contextual drivers. Given that the process of professional socialisation, that which takes place during initial teacher education, has thus far demonstrated little impact on the value orientations of

PE teachers (Gillespie, 2011), this study suggests that there is particular merit in the reflections of PE teacher educators being shared openly with preservice teachers. There may be an opportunity whereby PE teacher educators can reflect openly with their students on the views they themselves ascribe to PE and explain the influences that have acted to either alter or strengthen these views throughout their careers. The participants in this study found that their participation in the interviews had stimulated their thinking and prompted an intention to reflect further with colleagues on the purpose and aims of their work. Such reflection may also be beneficial for aspiring teachers and serve to keep the focus and purpose of their work and forces acting on their views overt, such that a proactive, rather than reactive, approach to the subject may be embraced.

7.3 Professional Relationships and Entry to the Profession

Echoing the broader literature on teacher educators (Mayer et al., 2011; Murray, 2016), few participants in this study planned or foresaw a career in teacher education. Further, the findings outlined in Paper III outlined the important influence of professional relationships to the seemingly serendipitous career changes of those who shared their experiences here. It was often encouragement from those already in the profession that prompted decisions to progress towards a career in teacher education. At key turning points in participants' careers, the influence of relationships with others was also often found to be instrumental. The significance of this finding lies in the fact that the influence of teacher educators on the professional pathways of their existing and prospective colleagues is a topic rarely addressed in the literature. This significance is heightened given the stress policy makers are increasingly placing on the importance of teacher educator recruitment and selection (European Commission, 2013; 2017). The vocational requirements of the teacher education profession have not been well defined internationally and it has been suggested that this has resulted in a certain 'freedom of decision' among those responsible for teacher education recruitment (Caena, 2013, 7).

As evidenced in this study, the initial stages of teacher educator selection can often be characterised by an academic noting the promise of an individual, encouraging them in one professional direction or another, and providing mentorship or career advice. Such processes are often informal but the experience of participants in this study suggests that they can have significant long-lasting effects when they interact with the self-efficacy, goal orientations and/or outcome expectations of prospective teacher educators. Because teacher educators are involved in the design and implementation of teacher education programmes, as well as the research on which such programmes are founded, the selection and support of such teacher educators is arguably one of the most important tasks existing staff can undertake and must require a number of

related competencies worthy of exploration. In their professional profile of teacher educators, Koster, Brekelmans, Korthagen, and Wubbels (2005), identified 27 tasks teacher educators 'have to do' and 29 competencies teacher educators 'should possess'. It is notable that while the selection and support of future teachers featured in the profile, the selection and support of future teacher educators was not mentioned. While much emphasis is correctly placed on teacher educators recruiting and supporting prospective school teachers, their role in recruiting and supporting each other is also worth considering further, both in research and in institutional systems and support mechanisms.

7.4 Professional Relationships and Professional Development and Learning

In addition to professional relationships being significant at the stage of entry to the profession, the important role professional relationships can play in the professional development and learning of PE teacher educators throughout their careers was also highlighted in Paper III. It was evident that the influence of professional relationships was significant in shaping the identity, values and priorities of participants, in addition to influencing the career decisions they made. Increasingly, evidence is demonstrating that the most influential professional learning takes place in informal workplace setting and interactions with colleagues (Boyd, Harris, & Murray, 2011; Harrison & McKeon, 2008). Research with teacher educators across six countries found that the second most preferred form of professional development opportunity among participants was 'informal learning conversations with other colleagues' (Czerniawski, et al. 2017, 133). Further, Koster et al. did mention 'giving guidance and support to, and receiving guidance and support from, colleagues' in their professional profile of teacher educators (2005, 166). Given the varied pathways through which teacher educators travel and the range of experiences, strengths and weaknesses that accompany them into their professional roles, flexible, adaptable learning and development is especially important. As found in this study, supportive collegial conversations, and the relationships in which they are embedded, can be instrumental in helping teacher educators to construct their professional identities, allowing them to feel part of a professional community and laying the foundation for their professional learning (Izadinia, 2014; Williams & Ritter, 2010).

Research by Richards, McLoughlin, Ivy & Lux Gaudreault (2017) suggests that the importance of supportive relationships is also significant for today's early career PE teacher educators. In the context of the changing higher education landscape with increasing expectation and pressure on early career academics (Alfrey, Enright & Rynne, 2017), the truism holds that history may not repeat but it rhymes. Professional relationships have always and will always be influential in the professional development and learning of teacher

educators. Acknowledging this and exploring its implications further may be helpful in supporting future PE teacher educators.

The findings of this study also remind us that, while the effect of professional relationships are often positive, unsupportive relationships have the capacity to hinder the development of PE teacher educators and this is something worthy of note. In some cases, unsupportive professional relationships were shown to impact on the professional journeys of participants in this study. Considerations regarding the effect those who work in teacher education can/should have on the professional learning and development, and the job satisfaction, of their colleagues may be important during the development of structures, policies and processes. Senior institutional managers and policy developers may be well advised to consult with teacher educators regarding the roles they play in the professional development and learning of colleagues and early-career teacher educators, and whether they have the knowledge, skills and supports needed to optimise this process.

7.5 Experience as Researchers

The various underlying feelings presented in Paper IV, which participants associated with the research aspect of their work, pointed to the potential of the research work of PE teacher educators to strongly impact their job satisfaction. Among participants in this study, it was found that research was often squeezed into the margins of the work day and tended to spill over into participants' evenings and weekends. All enjoyed the research process and there were strong positive feelings about pursuing particular topics. However, the institutional pressure felt by some to publish more often than they felt could be done with integrity and to pursue certain topics in certain ways irrespective of preference, although resisted by most, had a negative effect on the level of job satisfaction of many and created a mismatch between personal and institutional priorities.

The findings of the large-scale international survey of teacher educators conducted by Czerniawski and colleagues suggest that the experiences of time constraints and difficulty balancing workloads shared by participants in this study are reflected in the experiences of teacher educators more broadly (Czerniawski, et al., 2017). Tuinamuana, examining the work of teacher educators from the perspective of institutional representatives and relevant documents, found that the combined teaching and research roles of teacher educators sees them work at a high level of pressure and surrounded by expectations that 'somehow or other, in this maze of intense pressure, teacher educators will battle to continue to do the academic, relational and ethical work of teacher education' (Tuinamuana, 2016, 343). Concerns voiced by Murray (2012) regarding the impact of the intensity of work engaged in by teacher educators, often without due acknowledgement, on their wellbeing, resilience

and career development are pertinent here. For teacher educators to have sufficient time to balance the research responsibilities with other aspects of their role, it has been argued that discussion is needed with institutional management and department leaders regarding how they can promote positive change (Saito, 2013).

In line with the findings from this study regarding the importance of professional relationships for enhancing professional learning, working in research teams was seen as key to sharing the research workload, filling skills gaps and easing time pressures among participants in this study. Collaboration with colleagues and research students was seen as helpful in filling skills gaps within teams. However, the fact of such gaps existing does provide a caution for the future. Livingston et al. (2009) suggest that institutions are well advised to facilitate a needs identification process with beginning teacher educators, whereby they explore what needs they have with regard to research so that skills and knowledge gaps can be addressed, and tailored support provided.

7.6 Communicating Research Across Linguistic Boundaries

Another notable insight from Paper IV was the frustrations that can attend the necessity to publish in English and the comparatively low level of attention sometimes paid in peer-reviewed articles to research published in other languages. Those who do not speak or write in English in their daily work are required increasingly to perform the additional task of translating research findings into English while witnessing the lack of frequency with which research in their own languages is attended to internationally. Examining the global landscape of scholarship of teacher education, Hamilton and Loughran (2016) lament the fact that international authors often constitute a minority influence on the global knowledge base of teacher education, when compared to their North American counterparts. There may be a need to consider how research in different languages can be accessed more widely.

Research syntheses that combine research from multiple linguistic traditions and can be shared with a broad audience would be helpful. International associations such as the International Association for Physical Education in Higher Education (AIESEP) and the Research in Sport Pedagogy Network of the European Education Research Association (EERA) are well placed to co-ordinate such multi-lingual research syntheses. The custom in some journals which requires abstracts to be published in multiple languages is another practice that journals in the field could consider adopting to increase the likelihood that researchers can at least be alerted to related research being conducted in another language. Kirk (2010) has suggested that researchers should ensure they are informed by related research conducted in languages other than their own and that they could facilitate this by learning to read research papers in other languages. Working, where possible, in multilingual teams would also allow for sharing of research findings and perspectives.

Additionally, research syntheses that combine research from multiple linguistic traditions and can be shared with a broad audience would be helpful.

Overall, this thesis points to a need, as highlighted by Czerniawski, et al. (2017, 137), 'for opportunities to generate critical and collaborative professional learning conversations'. The authenticity of such conversations may be heightened by taking account of differences in teacher educators' motives, contexts, work roles, levels of autonomy, felt institutional priorities, felt disciplinary priorities and underlying feelings about the research experience. It is hoped that the insights shared in this study regarding the social dimension of the teacher education profession and the realities of being researchers and PE teacher educators may serve to inform such important conversations.

REFERENCES

- Alfrey, L. Enright, E. & Rynne, S. B. 2017. Letters from early career academics: the physical education and sport pedagogy field of play. *Sport, Education & Society* 22(1), 5-21.
- Anderson, S. Allen, P. Peckham, S. & Goodwin, N. 2008. Asking the right questions: Scoping studies in the commissioning of research on the organisation and delivery of health services. *Health Research Policy and Systems* 6(7), 1-12.
- Arskey, H. & O'Malley, L. 2005. Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology* 8(1), 19-32.
- Bandura, A. 1986. *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barnett-Page, E. & Thomas, J. 2009. Methods for the synthesis of qualitative research: A critical review. *BMC Medical Research Methodology* 9(59), 1-11.
- Bates, T. Swennen, A. & Jones, K. 2011. *The professional development of teacher educators*. Oxon: Routledge.
- Ben-Peretz, M. Kleeman, S. Reichenberg, R. & Shimoni, S. 2010. Educators of educators: their goals, perceptions and practices. *Professional Development in Education* 36(1-2), 111-129.
- Berei, C. P. Pratt, E. Parker, M. Shephard, K. Liang, T. Nampai, U. & Neamphoka, G. 2017. Guideposts and roadblocks to the career-long scholarly engagement of physical education teacher education faculty. *Research Quarterly for Exercise and Sport* 88(4), 455-467.
- Bogdan, R. & Biklen, S. K. 2003. *Qualitative research for education: An introduction to theory and methods* (4th ed.). New York: Pearson.
- Booth, A. Papaioannou, D. & Sutton, A. 2012. *Systematic approaches to a successful literature review*. London: Sage.
- Bower, G. G. 2007. Factors influencing the willingness to mentor 1st-year faculty in physical education departments. *Mentoring & Tutoring: Partnership in Learning* 15(1), 73-85.
- Boyd, P. Harris, K. & Murray, J. 2011. *Becoming a teacher educator: Guidelines for induction*. Bristol: Higher Education Academy.
- Boyd, P. & Smith, C. 2016. The contemporary academic: orientation towards research work and researcher identity of higher education lecturers in the health professions. *Studies in Higher Education* 41(4), 678-695.
- Boyer, E. 1990. *Scholarship reconsidered: Priorities of the professoriate*. San Francisco, CA: Jossey-Bass.
- Braun, V. & Clarke, V. 2006. Using thematic analysis in Psychology. *Qualitative Research in Psychology* 3(2), 77-101.
- Brew, A. & Lucas, L. 2009. Introduction: academic research and researchers. In A. Brew & L. Lucas (Eds.), *Academic research and researchers* (pp. 1-12). Berkshire, UK: McGraw-Hill.

- Bronkhorst, L. H. Meijer, P. C. Koster, B. & Vermunt, J. D. 2011. Fostering meaning-oriented learning and deliberate practice in teacher education. *Teaching and Teacher Education* 27(1), 1120-1130.
- Bruce, J. 2013. Dancing on the edge: a self-study exploring postcritical possibilities in physical education. *Sport, Education and Society* 18(6), 807-824.
- Caena, F. 2013. Education: Policy support for teacher educators. Perspectives on teacher educator policies in European countries: an overview. Working document. Strasbourg: European Union.
- Casey, A. & Fletcher, T. 2012. Trading places: From physical education teachers to teacher educators. *Journal of Teaching in Physical Education* 31(4), 362-380.
- Casey, A. & Fletcher, T. 2017. Paying the piper: the costs and consequences of academic advancement. *Sport, Education and Society* 22(1), 105-121.
- Cazers, G. & Curtner-Smith, M. 2013. Legacy of a pioneer African American educator. *Research Quarterly for Exercise and Sport* 84(1), 39-51.
- Chen, A. & Ennis, C. D. 1996. Teaching value-laden curricula in physical education. *Journal of Teaching in Physical Education* 15(3), 338-354.
- Cochran-Smith, M. 2005. Teacher educators as researchers: multiple perspectives. *Teaching and Teacher Education* 21(2), 219-225.
- Cochran-Smith, M. & Zeichner, K. M. 2005. Studying teacher education: The report of the AERA Panel on Research and Teacher Education. Washington DC: AERA.
- Cole, M. & Smith, R. 2014. Life history of Karen. A physical education educator with an impairment. *Palaestra* 28(2), 47-53.
- Colquhoun, H. L. Levac, D. O'Brien, K. K. Straus, S. Tricco, A. C. Perrier, L. Kastner, M. & Moher, D. 2014. Scoping reviews: time for clarity in definition, methods, and reporting. *Journal of Clinical Epidemiology* 67(12), 1291-1294.
- Cutforth, N. 2013. The journey of a community-engaged scholar: An autoethnography. *Quest* 65(1), 14-30.
- Czerniawski, G., Guberman, A. & MacPhail, A. 2017. The professional developmental needs of higher education-based teacher educators: an international comparative needs analysis. *European Journal of Teacher Education*, 40(1), 127-140.
- Dodds, P. 2005. Chapter 4: PETE women's experiences of being mentored into postsecondary faculty positions. *Journal of Teaching in Physical Education* 24(4), 344-367.
- Dodds, P. 2009. When tadpoles grew legs and began to walk upon the land: The earliest days of PETE doctoral programs and research. In L. D. Housner, M. W. Metzler, P. G. Schempp, & T. J. Templin (Eds.), *Historic traditions and future directions of research on teaching and teacher education in physical education* (pp. 303-314). Morgantown: Fitness Information Technology.

- Elliott, R. & Timulak, L. 2005. Descriptive and interpretive approaches to qualitative research. In J. Miles & P. Gilbert (Eds.), *A handbook of research methods for clinical and health psychology* (pp. 147-159). Oxford: Oxford University Press.
- Ennis, C. D. 1992. The influence of value orientations in curriculum decision making. *Quest* 44(3), 317-329.
- Enright, E. Alfrey, L. & Rynne, S. B. 2017. Being and becoming an academic in the neoliberal university: a necessary conversation. *Sport, Education and Society* 22(1), 1-4.
- Erickson, L. B. Young, J. R. & Pinneger, S. 2011. Teacher educator identity: Emerging understandings of person, positioning, roles, and collaborations. *Studying Teacher Education: A journal of self-study of teacher education practices* 7(2), 105-107.
- European Commission. 2013. *Supporting teacher educators for better learning outcomes*. Strasbourg: Author.
- European Commission. 2017. *Modernisation of higher education in Europe: Academic staff (Eurydice report)*. Strasbourg: Author.
- Fletcher, T. & Bullock, S. M. 2012. Enacting literacy pedagogies: A collaborative self-study by teacher educators in physical education and science. *Studying Teacher Education* 8(1), 19-33.
- Fletcher, T. & Casey, A. 2014. The challenges of models-based practice in physical education teacher education: A collaborative self-study. *Journal of Teaching in Physical Education* 33(3), 403-421.
- Fletcher, T. & Casey, A. 2017. "Apprentice wanted to build ivory tower" Socialisation into higher education. In K. A. R. Richards and K. L. Gaudreault (Eds.). *Teacher socialization in physical education: New perspectives* (pp. 212-225). New York, NY: Routledge.
- Fletcher, T. Ní Chróinín, D. & O'Sullivan, M. 2018. A layered approach to critical friendship as a means to support pedagogical innovation in pre-service teacher education. *Studying Teacher Education. A journal of self-study of teacher education practices* 12(3), 302-319.
- Garbett, D. & Ovens, A. 2012. Being a teacher educator: exploring issues of authenticity and safety through self-study. *Australian Journal of Teacher Education* 37(3), 44-56.
- Gelfuso, A. 2017. Facilitating the development of preservice teachers' Pedagogical Content Knowledge of literacy and agentic identities: Examining a teacher Educator's intentional language choices during videomediated reflection. *Teaching and Teacher Education* 66, 33-46.
- Gillespie, L. B. 2011. Exploring the 'how' and 'why' of value orientations in physical education teacher education. *Australian Journal of Teacher Education* 36(9), 58-74.
- Goc Karp, G. Williamson, K. & Shifflett, B. 1996. Physical education teacher educators' work roles in research and doctoral-granting institutions. *Journal of Teaching in Physical Education* 15(2), 251-265.

- Graber, K. C. 1993. The emergence of faculty consensus concerning teacher education: The socialization process of creating and sustaining faculty agreement. *Journal of Teaching in Physical Education* 12(4), 424-436.
- Graber, K. C. & Schempp, P. G. 2000. The influence of a generalist-taught methods course. *Physical Educator* 57(4), 178-192.
- Griffiths, V. Thompson, S. & Hryniewicz, L. 2010. Developing a research profile: Mentoring and support for teacher educators. *Professional Development in Education* 36(1-2), 245-262.
- Griffiths, V. Thompson, S. & Hryniewicz, L. 2014. Landmarks in the professional and academic development of mid-career teacher educators. *European Journal of Teacher Education* 37(1), 74-90.
- Gubacs-Collins, K. 2007. Implementing a tactical approach through action research. *Physical Education and Sport Pedagogy* 12(2), 105-126.
- Guillemin, M. & Gillam, L. 2004. Ethics, reflexivity, and "ethically important moments" in research. *Qualitative Inquiry* 10(2), 261-280.
- Hamilton, M. K. Pinnegar, S. & Davey, R. 2016. Intimate scholarship: An examination of identity and inquiry in the work of teacher educators. In J. Loughran & M. L. Hamilton (Eds.), *International handbook of teacher education* (pp. 181-237). Singapore: Springer.
- Hansen, D. T. 2008. Values and purpose in teacher education. In M. Cochran Smith, S. Feimen-Nemser, & D. J. McIntyre (Eds.), *Handbook of research on teacher education. Enduring questions in changing contexts* (3rd ed., pp. 10-26). London: Routledge.
- Harrison, J. & McKeon, F. 2008. The formal and situated learning of beginning teacher educators in England: identifying characteristics for successful induction in the transition from workplace in schools to workplace in higher education. *European Journal of Teacher Education* 31(2), 151-168.
- Hetland, K. & Strand, B. 2012. A status report of PETE faculty in the central district. *Physical Educator* 69(1), 36-51.
- Hordvik, M. M. MacPhail, A. & Ronglan, L. T. 2017. Teaching and learning sport education: A self-study exploring the experiences of a teacher educator and pre-service teachers. *Journal of Teaching in Physical Education* 36(2), 232-243.
- Hökkä, P. Vähäsantanen, K. & Mahlakaarto, S. 2016. Teacher educators' collective professional agency and identity - Transforming marginality to strength. *Teaching and Teacher Education* 63, 36-46.
- Izadinia, M. 2014. Teacher educators' identity: A review of literature. *European Journal of Teacher Education* 37(4), 426-441.
- Jewett, A. E. Bain, L. L. & Ennis, C. D. 1995. *The curriculum process in physical education* (2nd ed.). Madison, WI: Brown & Benchmark.
- Kelchtermans, G. Smith, K. & Vanderlinde, R. 2018. Towards an 'international forum for teacher educator development': an agenda for research and action. *European Journal of Teacher Education* 41(1), 120-134.

- Kirk, D. 2010. Current status and future trends in research on physical education in Europe: Some critical issues for why research matters. Keynote Address to the 5th International Congress and XXVI National Conference of the INEFC, University of Barcelona, 4-6 February. Retrieved from <http://www.ub.edu/Vcongresinternacionaleducacionfisica/userfiles/file/ConferenciasFinal/Conferencia1.pdf>
- Kirk, D. & MacDonald, D. 2001. The social construction of PETE in higher education: Toward a research agenda. *Quest* 53(4), 440-456.
- Korthagen, F. Loughran, J. & Lunenberg, M. 2005. Teaching teachers – studies into the expertise of teacher educators: An introduction to this theme issue. *Teaching and Teacher Education* 21(2), 107-115.
- Kosnik, C. Menna, L. Dharamshi, P. Miyata, C. & Beck, C. 2013. A foot in many camps: literacy teacher educators acquiring knowledge across many realms and juggling multiple identities. *Journal of Education for Teaching* 39(5), 523-540.
- Kosnik, C. Miyata, C. Cleovoulou, Y. Fletcher, T. & Menna, L. 2015. The education of teacher educators. In T. Falkenberg (Ed.), *Handbook of Canadian research in initial teacher education* (pp. 207-224). Ottawa, ON: Canadian Association of Teacher Education.
- Koster, B. Brekelmans, M. Korthagen, F. & Wubbels, T. 2005. Quality requirements for teacher educators. *Teaching and Teacher Education* 21(2), 157-176.
- Lawson, H. A. 1983a. Toward a model of teacher socialization in physical education: The subjective warrant, recruitment, and teacher education (part 1). *Journal of Teaching in Physical Education* 2(3), 3-16.
- Lawson, H. A. 1983b. Toward a model of teacher socialization in physical education: Entry into schools, teachers' role orientations, and longevity in teaching (part 2). *Journal of Teaching in Physical Education* 3(1), 3-15.
- Lawson, H. A. 1990. Sport pedagogy research: From information gathering to useful knowledge. *Journal of Teaching in Physical Education* 10(1), 1-20.
- Lawson, H. A. 1991. Future research on physical education teacher education professors. *Journal of Teaching in Physical Education* 10(3), 229-248.
- Lee, H-M. & Curtner-Smith, M. D. 2011. Impact of occupational socialization on the perspectives and practices of sport pedagogy doctoral students. *Journal of Teaching in Physical Education* 30(3), 296-313.
- Legge, M. F. 2014. Autoethnography and teacher education: snapshot stories of cultural encounter. *Australian Journal of Teacher Education* 39(5), 117-134.
- Lent, R. W. Brown, S. D. & Hackett, G. 1994. Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior* 45(1), 79-122.
- Lent, R. W. Brown, S. D. & Hackett, G. 2000. Contextual supports and barriers to career choice. *Journal of Counselling Psychology* 47(1), 36-49.
- Lent, R. W. Brown, S. D. & Hackett, G. 2002. Social cognitive career theory. In D. Brown and Associates (Eds.), *Career choice and development* (4th ed.) (pp. 255-331). San Francisco, CA: Jossey-Bass.

- Levac, D. Colquhoun, H. & O'Brien, K. 2010. Scoping studies: Advancing the methodology. *Implementation Science* 5(69), 1-9.
- Lincoln, Y. S. & Guba, E. G. 1985. *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Livingston, K. 2014. Teacher educators: Hidden professionals? *European Journal of Education* 49(2), 218-232.
- Livingston, K. McCall, J. & Morgado, M. 2009. Teacher educators as researchers. In A. Swennen & M. van der Klink (Eds.), *Becoming a teacher educator. Theory and practice for teacher educators* (pp. 191-203). Dordrecht: Springer.
- Locke, L. F. 1984. Research on teaching teachers: Where are we now? *Journal of Teaching in Physical Education Monograph* 2, 1-86.
- Macdonald, D. 1993. Knowledge, gender and power in physical education teacher education. *Australian Journal of Education* 37(3), 259-278.
- Mayer, D. Mitchell, J. Santoro, N. & White, S. 2011. Teacher educators and 'accidental' careers in academe: An Australian perspective. *Journal of Education for Teaching: International Research and Pedagogy* 37(3), 247-260.
- McEvoy, E. Enright, E. & MacPhail, A. 2017. Negotiating 'ethically important moments' in research with young people: reflections of a novice researcher. *Leisure Studies* 36(2), 170-181.
- McMahon, J. A. & Huntly, H. E. 2013. The lived and living bodies of two health and physical education tertiary educators: How embodied consciousness highlighted the importance of their bodies in their teaching practice in HPE. *Australian Journal of Teacher Education* 38(4), 31-49.
- Metzler, M. W. & Freedman, M. S. 1985. Here's looking at you PETE: a profile of physical education teacher education faculty. *Journal of Teaching in Physical Education*, 4, 123-133.
- Mitchell, M. F. 1992a. A descriptive analysis and academic genealogy of major contributors to JTPE in the 1980s. *Journal of Teaching in Physical Education* 11(4), 426-442.
- Mitchell, M. F. 1992b. Scholarly behaviors of physical education methods teacher educators in Ohio. *Journal of Teaching in Physical Education* 11(3), 303-314.
- Mitchell, M. F. 1997. Productive physical education pedagogy scholars: why they do it and how. *Journal of Teaching in Physical Education* 16(3), 278-299.
- Mitchell, M. F. & Lawson, H. 1986. Career paths and role orientations of professors of teacher education in physical education. In M. Pieron, & G. Graham (Eds.), *Sport pedagogy* (pp. 41-46). Champaign, IL: Human Kinetics.
- Montenegro Maggio, H. 2016. The professional path to become a teacher educator: the experience of Chilean teacher educators. *Professional Development in Education* 42(4), 527-546.

- Morberg, A. & Eisenschmidt, E. 2009. Second-phase induction for teacher educators: Challenges and possibilities. In A. Swennen & M van der Klink (Eds.), *Becoming a teacher educator. Theory and practice for teacher educators* (pp. 103-113). Dordrecht: Springer.
- Murray, J. 2012. Performativity cultures and their effects on teacher educators' work. *Research in Teacher Education* 2(2), 19-23.
- Murray, J. 2016. Beginning teacher educators: Working in higher education and schools. In J. Loughran & M. L. Hamilton (Eds.), *International handbook of teacher education* (pp. 503-518). Singapore: Springer.
- Murray, J. & Harrison, J. 2008. Editorial. *European Journal of Teacher Education* 31(2), 109-115.
- Murray, J. & Male, T. 2005. Becoming a teacher educator: Evidence from the field. *Teaching and Teacher Education* 21(2), 125-142.
- Parker, M. Sutherland, S. Sinclair, C. & Ward, P. 2011. Not surprised, but concerned: The professoriate's reaction to PETE doctoral education in the United States. *Journal of Teaching in Physical Education* 30(2), 157-177.
- Patton, K. Pagnano, K. Griffin, L. L. Dodds, P. Sheehy, D. Arnold, R. . . . James, A. 2005. Chapter 2: Navigating the mentoring process in a research-based teacher development project: A situated learning perspective. *Journal of Teaching in Physical Education* 24(4), 302-325.
- Patton, K. & Parker, M. 2017. Teacher education communities of practice: More than a culture of collaboration. *Teaching and Teacher Education* 67, 351-360.
- Patton, M. Q. 2002. *Qualitative research and evaluation methods* (3rd ed.). London: Sage.
- Pearson, J. 2011. Adapting the boundaries in primary physical education: an account of my learning, my educational influence and improved practice. *Educational Action Research* 19(4), 503-515.
- Pillow, W. 2003. Confession, catharsis or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. *International Journal of Qualitative Studies in Education* 16(2), 175-196.
- Richards, K. A. R. McLoughlin, G. M. Ivy, V. N. & Lux Gaudreault, K. 2017. Understanding physical education doctoral students' perspectives of socialization. *Journal of Teaching in Physical Education* 36(4), 510-520.
- Richards, K. A. R. Washburn, N. Carson, R. L. & Hemphill, M. A. 2017. A 30-year scoping review of the physical education teacher satisfaction literature. *Quest* 69(4), 494-514.
- Robinson, D. B. 2018. Religion as an other(ed) identity within physical education: A scoping review of relevant literature and suggestions for practice and inquiry. *European Physical Education Review*. DOI: 10.1177/1356336X17747860
- Robinson, D. B. Berg, S. & Gleddie, D. 2018. A scoping review of school-based physical activity and health eating/nutrition interventions. *PHENex Journal* 9(2), 1-26.

- Rovegno, I. & Bandhauer, D. 1998. A study of the collaborative research project: Shared privilege and shared empowerment. *Journal of Teaching in Physical Education* 17(3), 357-375.
- Rubin, H. J. & Rubin, I. S. 1995. *Qualitative interviewing. The art of hearing data*. London: Sage.
- Russell, T. & Loughran, J. 2010. Probing the depths of a teacher educator's work. *Studying Teacher Education* 6(1), 1-2.
- Russell, J. Lux Gaudreault, K. & Richards, K. A. 2016. Doctoral student socialization: Educating stewards of the physical education profession. *Quest* 68(4), 439-456.
- Saito, E. 2013. When a practitioner becomes a university faculty member: a review of literature on the challenges faced by novice ex-practitioner teacher educators. *International Journal for Academic Development* 18(2), 190-200.
- Scott, P. 2009. Foreword. In A. Brew & L. Lucas (Eds.), *Academic research and researchers* (pp. xiii-xviii). Berkshire, UK: McGraw-Hill.
- Shehu, J. 2009. Professional development experiences of physical education teachers in Botswana: epistemological implications. *Teacher Development: An International Journal of Teachers' Professional Development* 13(3), 267-283.
- Silverman, D. 2013. *Interpreting qualitative data* (4th ed.). London: Sage.
- Silverman, S. Hodges Kulinna, P. & Philips, S. R. 2014. Physical education pedagogy faculty perceptions of journal quality. *Journal of Teaching in Physical Education* 33(1), 134-154.
- Smith, B. & McGannon, K. R. 2017. Developing rigor in qualitative research: problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology*, doi: 10.1080/1750984X.2017.1317357
- Sofa, S. & Curtner-Smith, M. D. 2010. Development of pre-service teachers' value orientations during a secondary methods course and early field experience. *Sport, Education and Society* 15(3), 347-365.
- Strauss, A. & Corbin, J. 1998. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Sparkes, A. C. 2007. Embodiment, academics, and the audit culture: a story seeking consideration. *Qualitative Research* 7(4), 521-550.
- Swennen, A. & Bates, T. 2010. The professional development of teacher educators. *Professional Development in Education* 36(1/2), 1-7.
- Teddlie, C. & Yu, F. 2007. Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research* 1(1), 77-100.
- Tryggvason, M-T. 2012. Perceptions of identity among Finnish university-based subject teacher educators. *European Journal of Teacher Education* 35(3), 289-303.
- Tsangaridou, N. 2006. Teachers' beliefs. In D. Kirk, D. MacDonald, & M. O'Sullivan (Eds.), *The handbook of physical education* (pp. 486-501). London: Sage.

- Tuinamuana, K. 2016. The work of the teacher-educator in Australia: Reconstructing the "superhero" performer/academic in an audit culture. *Asia-Pacific Journal of Teacher Education* 44(4), 333-347.
- Van der Klink, M. Kools, Q. Avissar, G. White, S. & Sakata, T. 2017. Professional development of teacher educators: what do they do? Findings from an explorative international study. *Professional Development in Education* 43(2), 163-178.
- Vanassche, E. & Kelchtermans, G. 2014. Teacher educators' professionalism in practice: Positioning theory and personal interpretative framework. *Teaching and Teacher Education* 44, 117-127.
- Ward, P. Parker, M. Sutherland, S. & Sinclair, C. 2011. A critical examination of the curriculum of physical education teacher education doctoral programs. *Journal of Teaching in Physical Education* 30(2), 145-156.
- Webb, L. A. & Scoular, T. 2011. Reflection on reflection on reflection: collaboration in action research. *Educational Action Research* 19(4), 469-487.
- Williams, J. & Ritter, J. K. 2010. Constructing new professional identities through self-study: from teacher to teacher educator. *Professional Development in Education* 36(1-2), 77-92.
- Williams, J., Ritter, J., & Bullock, S.M. 2012. Understanding the complexity of becoming a teacher educator: experience, belonging, and practice within a professional learning community. *Studying teacher education: a journal of self-study of teacher education practices*, 8 (3), 245-260.
- Williamson, K. M. 1990. Conflicting demands for physical education teacher educators: Institutional rewards versus role expectations. *Physical Educator* 47(1), 11-15.
- Williamson, K. M. 1993. A qualitative study on the socialisation of beginning physical education teacher educators. *Research Quarterly for Exercise and Sport* 64(2), 188-201.
- Williamson, K. M. & Stroot, S. A. 1994. Benefits, limitations, and implications of collaborative research among beginning physical education teacher educators. *Physical Educator* 51(4), 170-178.
- Woods, M. L. Philips, D., A. & Carlisle, C. 1997. Characteristics of physical education teacher educators. *Physical Educator* 54(3), 150-159.
- Yang, J. J. & Elliott, G. 1999. Socialization and leadership in adapted physical education/activity: Perspectives of female faculty. *Physical Educator* 56(2), 83-90.
- Åkerlind, G. S. 2008. An academic perspective on research and being a researcher: an integration of the literature. *Studies in Higher Education* 33(1), 17-31.

APPENDICES

Appendix A: Interview Schedules

The following interview schedules were provided to participants in advance of the interview.

Schedule for Initial Interview

Background

- Would you describe yourself as a physical education teacher educator?
- Please briefly describe your background i.e. how you came to be in your current position?
 - Background experiences and interests; entry to the profession

Professional role

- How would you describe your current position?
 - Working hours; responsibilities; interests
- What is it like to be a PE teacher educator?
 - Best/worst parts of the job; challenges and how they are dealt with

Context and professional views

- What is your personal vision of PE teacher education?
- What is the philosophy of the PE teacher education programme in which you work?
- Please describe your PE teacher education programme?
- Do you prepare physical education teachers in a different way to the way in which you were prepared?
- What do you see as the purpose of school physical education?
 - Has this always been your view? If not, what changed? What influences this view?
 - Role of physical education in physical activity promotion/obesity prevention?

General exploratory questions

- What challenges are facing the PE teacher education community at the moment?
- What opportunities do you see for the PE teacher education community?
- If you could ask one question of PE teacher educators worldwide, what would it be?

- Is there anything that I have not asked that you would like to comment on or add?

Schedule for Follow-up Interview

Professional journey

Questions in this section were different for each participant and followed directly from the background and context data gathered in the initial interview.

In general, the questions focused on the following areas:

- Looking back over your career, do you see particular moments/events/decisions/ people as representing significant landmarks/turning points that shaped your professional journey or your development as a PE teacher educator?
- What would you say were the high points and low points in your career?
- What factors affected your career decisions?

Relationship with research

- In the last interview you described your breakdown of time between teaching, research and administration. Is this still the case? Why any change?
- Where does research sit among your professional priorities? Why?
- How would you characterise your relationship with research in general?
- Has your relationship with research changed over time? How/Why?
- How has research interacted with your professional learning as a physical education teacher educator?
- How has research interacted with your professional practice as a physical education teacher educator?
- How has research interacted with your professional views as a physical education teacher educator?

Research practices and skills

- Do you keep up to date with current research? Why? How?
- Are you part of any research communities/networks (formal or informal)?
- What has determined the research topics you have focused on?
- What has determined where you have published your research?
- How do you assess the impact of your research?
- What skills/characteristics do you think are important in being a good researcher?
- How did you acquire your research skills?

Barriers/Enablers

- What, if anything, facilitates your research endeavours?
- What, if anything, hinders your research endeavours?
- Is there anything that I have not asked that you would like to comment on or add?

ORIGINAL PAPERS

I

PHYSICAL EDUCATION TEACHER EDUCATORS: A 25-YEAR SCOPING REVIEW OF LITERATURE

by

McEvoy, E., MacPhail, A., & Heikinaro-Johansson, P. (2015)

Teaching and Teacher Education, 51, 162-181

Reproduced with kind permission by Elsevier.



Review

Physical education teacher educators: A 25-year scoping review of literature

Eileen McEvoy^{a,*}, Ann MacPhail^{b,1}, Pilvikki Heikinaro-Johansson^{a,2}^a Department of Sport Sciences, Faculty of Sport and Health Sciences, P.O. Box 35 (L), FI-40014 University of Jyväskylä, Finland^b Department of Physical Education and Sport Sciences, University of Limerick, Castletroy, Limerick, Ireland

HIGHLIGHTS

- 96 papers identified between 1990 and 2014.
- Large increase in number of journals and countries represented over time.
- Practitioner inquiry particularly popular in last decade.
- Gaps evident, particularly on PE teacher educators beyond North America.
- Need for co-ordinated approach to future research on this population.

ARTICLE INFO

Article history:

Received 27 May 2015

Accepted 8 July 2015

Available online xxx

Keywords:

Physical education

Teacher educator

Physical education teacher education

Review

ABSTRACT

This paper presents a scoping review of literature on physical education teacher educators (1990–2014). The intent is to map research to date on this population and provide a useful context for the design and conduct of future scholarly inquiry. A total of 96 papers were included in the review. The included articles emerged from 15 countries and 25 journals. While much is known about US physical education teacher educators, there are many knowledge gaps regarding this population in other countries. The conclusions highlight a need for a co-ordinated approach to future research on physical education teacher educators.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

The teacher education profession has enjoyed an increased research focus in recent years, particularly notable in the various journal special issues dedicated to this unique population (e.g. Elliott-Johns & Tidwell, 2013; Erickson, Young, & Pinneger, 2011; Korthagen, Loughran, & Lunenberg, 2005; Murray & Harrison, 2008; Swennen & Bates, 2010). The European Commission, indicating an interest in teacher educators at national and international policy level, published a document recognising the importance of the teacher education profession and, in a dedicated chapter informed by much of the research mentioned above, stressed a need for a stronger knowledge base to assist governments in providing support to the work of teacher educators (European Commission, 2013). It therefore seems likely that research on

teacher educators is set to further expand.

Within the field of physical education (PE), teacher educators have also enjoyed considerable research attention for close to three decades. The most cited publication from the early years of this research is that of Metzler and Freedman (1985). These authors endeavoured, through a questionnaire survey of 171 PE teacher education (PETE) faculty across the United States (US), to compile a profile of PE teacher educators, including information on their professional activities and responsibilities, and to garner participants' opinions regarding the then state of PETE programmes. Mitchell and Lawson (1986) complimented this article with an interview survey exploring the career paths, socialisation experiences and role orientations of 15 PE teacher educators in the US and Canada. A few years later, Lawson (1991) was the first to present scholars in the field with a conceptual framework with the aid of which he hoped they would be enabled to expand our knowledge of PE teacher educators. This seminal work was prompted by an increasing awareness of the pivotal roles played by this population in the 'reproduction and transformation of work practices in physical education' (Lawson, 1991, p. 229). Lawson's agenda

* Corresponding author.

E-mail addresses: epmcevoy@gmail.com (E. McEvoy), Ann.MacPhail@ul.ie (A. MacPhail), pilvikki.heikinaro-johansson@jyu.fi (P. Heikinaro-Johansson).¹ Tel.: +35361234155.² Tel.: +358408053943.

identified a number of research questions worth investigating such as (i) the motivations for and impact of the research endeavours of PE teacher educators, (ii) the personal, behavioural and institutional facilitators and constraints of their work, (iii) the paradigmatic and occupational communities they occupy, (iv) how they are socialised into the profession, and (v) their careers and career pathways, especially those of female and minority PE teacher educators. In order to appropriately investigate these themes, Lawson suggested a need for autobiographical, developmental, longitudinal and action-oriented methodological perspectives.

The years since Lawson's initial research impetus have witnessed an increase in research focused on PE teacher educators. Scholars continued to seek out and respond to new research questions in order to illuminate the professional worlds of this population. There has not, however, been any comprehensive review of this body of research. Ten years ago, the Panel on Research and Teacher Education of the American Educational Research Association listed the development of research questions and programmes which allow researchers to build on prior research as an essential strategy in the strengthening of the base of knowledge in teacher education (Cochran-Smith & Zeichner, 2005). According to this thinking, an overview of prior knowledge would seem a prerequisite of focused research programmes. The purpose of this paper is to review research carried out on, with and by PE teacher educators over the last 25 years, and identify areas where research is lacking, in order to provide scholars with a useful context for the design and conduct of future scholarly inquiry on PE teacher educators.

2. The choice of a scoping review

Unlike researchers carrying out a traditional systematic review, our intent in this study was less to find the answer to a specific question about a population and more to determine what questions have been asked so far, how such questions have been asked and to what end. We sought a different form of aggregation to that associated with a systematic review, more akin to the way in which pieces of a jigsaw puzzle fit together. Each study represents a different piece, uniquely shaped and having its own place in the overall puzzle. With the addition of each piece the picture becomes clearer. A different form of review, a scoping review of literature, was therefore deemed the appropriate choice for the purposes of this paper. The scoping review provides a 'snapshot of a particular topic area' (Booth, Papaioannou, & Sutton, 2012, p. 19). Anderson, Allen, Peckham, and Goodwin (2008) describe scoping reviews as ranging from general accounts of the literature to papers that are just short of systematic reviews. Our aim was to locate this review at the latter end of this spectrum. The most significant departure a scoping review takes from the systematic review is that a scoping review is absent any assessment of research quality. This is not to say that its reviewers do not value research quality, rather the purpose is one of charting, not evaluating.

3. Boundaries of the review

In order to delineate the boundaries of our review, it was important to define our broad research question. Anderson et al. (2008) recommend that reviewers use the stated purpose of their scoping review as a frame of reference in determining their research question. Arskey and O'Malley (2005) identify four possible purposes of a scoping review: (i) to examine the extent, nature and range of research activity, (ii) to determine the value of undertaking a full systematic review, (iii) to summarise and disseminate research findings or (iv) to identify research gaps in the existing research. Our interest in this paper resided largely in the first and last of these purposes. Our aim was to map the current

literature on PE teacher educators and also to identify any research gaps which exist with a view to informing a future research agenda. Our broad research question was, 'What peer-reviewed PE teacher educator data were published from 1990 to 2014?' The review did not include studies published online prior to an official publication date after 2014. Our review was limited to peer-reviewed articles published in English during the 25-year period from January 1st 1990 to December 31st 2014. The start date of January 1st 1990 was chosen based on our assessment, following an initial scan of the literature, that this was the year when research on this population began to emerge with some frequency. Articles in languages other than English were excluded due to the cost and time involved in translating articles. While it is acknowledged that these choices limit our results, such limitations were necessary to ensure the completion of the review in a timely manner.

3.1. Selection criteria

Another important characteristic separating the scoping review from a traditional systematic review is that in the latter exclusion and inclusion criteria are developed at the outset of the review, while in the former these criteria are developed during the screening process. The post hoc compilation of selection criteria in the scoping review process allows increased familiarity with the literature to facilitate the formulation of such criteria (Arskey & O'Malley, 2005). During our review process, as recommended by Levac, Colquhoun, and O'Brien (2010), the first two authors reviewed the identified articles and met at intervals to discuss inclusion/exclusion criteria; the third author was available to arbitrate in case the inclusion/exclusion of an article was difficult to decide. The final determination guiding our selection process was that articles would be included only if (i) they contained PE teacher educator data, (ii) the methods used to collect such data were specified, (iii) the data added to our knowledge of PE teacher educators, and (iii) the data was clearly distinguished from those of any other study participant(s). The term 'PE teacher educator data' was the root of considerable discussion because, depending on your epistemological perspective, many commentaries and non-empirical articles written by PE teacher educators could be considered data in themselves. In order to ensure the review did not become untenable, however, we determined to only include those studies in which data collection methods were outlined, or at the very least specified. Further, it was decided that if two or more articles meeting the inclusion criteria were derived from the same data set both articles would be included. Given the many ways in which teacher educators are defined (Livingston, 2014), we should also clarify that in this review PE teacher educators are defined as those educators based in higher education institutions who educate, and support the ongoing professional development of, future and practicing teachers of school PE. As such, data on PETE graduate assistants was considered relevant, while data on school-based PE co-operating teachers was not. Heads of department were not considered PE teacher educators unless specified.

We acknowledge the limitations our decisions imposed on what we wished to be as inclusive a review as possible. We particularly lament the fact that, in choosing to include only articles with identified data collection procedures, valuable relevant insights into PE teacher educators, which would certainly serve to complement the included papers, were not incorporated. For the interested reader, examples of such papers include Fernández-Balboa (1995), Sicilia Camacho and Fernández-Balboa (2006), Kirk (2014), Kovar (2004), MacPhail (2011), Siedentop (2002), Tannehill (2005) and Weiler (2007). Equally, there were empirical articles containing PE teacher educator data without such data being distinguished from that of other participants, which

precluded the possibility of including them in the review (e.g. Burden, Harrison, & Hodge, 2005; Douglas & Halas, 2013).

4. The review process

The scoping review process should be rigorous, transparent and replicable (Arskey & O'Malley, 2005; Booth et al., 2012). To this end, we now give a detailed account of the procedure undertaken to identify studies for inclusion in this review. Following the scoping review guidelines offered by various authors (Anderson et al., 2008; Arskey & O'Malley, 2005; Colquhoun et al., 2014; Levac et al., 2010), we employed a number of steps in identifying articles for review: (i) a search of electronic databases, (ii) a hand-search of key journals, and (iii) a search of reference lists of studies deemed of potential relevance.

4.1. Database search

Four databases were identified as those most relevant to the research topic: Academic Search Elite, ERIC, SportDiscus and Web of Science. These databases were chosen as they encompass the fields of education, sport and science/health. Prior to commencing the formal database search, an iterative process of trial searches was undertaken to determine which search terms would retrieve the widest range of pertinent studies. The following search terms were subsequently selected and entered into each database: 'physical education', 'PE', 'PETE', 'teacher educators', 'faculty' and 'lecturers'. In each case, the search terms were sought in the full text of articles. Search limiters were set to ensure the searches retrieved only peer-reviewed articles published in English between January 1st 1990 and July 31st 2014. (See section 4.4 for an explanation of the identification of studies between July 31st and December 31st 2014.)

A total of 1458 articles were identified through this initial database search, from which 206 duplicates were removed. The titles and abstracts of the remaining 1252 articles were then screened for relevance. In total, 1008 articles were categorized as irrelevant (beyond the scope of the review), resulting in 244 articles being categorized as potentially relevant after this first stage of the search. These 244 articles were then retrieved and read in full as a final screening step, resulting in the exclusion of a further 174 articles. Articles excluded at this stage encompassed (i) non-empirical articles ($n = 119$), (ii) empirical articles containing no PE teacher educator data ($n = 36$), (iii) empirical articles containing PE teacher educator data without such data being distinguishable from those of other study participants ($n = 13$), and (iv) empirical articles containing PE teacher educator data without such data adding to our knowledge of PE teacher educators ($n = 4$). Two articles were also excluded due to inconsistencies in the numerical data reported.

4.2. Manual journal search

Following the initial database search, a subsequent manual search was carried out, within the specified publication period, of those journals from which more than three articles has been categorised as relevant. Arskey and O'Malley (2005) suggest that this step can help to identify articles that may have been missed in the database searches. The full text of any article deemed of potential relevance was read and the article included/excluded accordingly. The journals manually searched were the *Australian Journal of Teacher Education* (one new article included), the *Journal of Teaching in Physical Education* (five new articles included), *Physical Education and Sport Pedagogy* (three new articles included), the *Physical Educator* (six new articles included), *Research Quarterly for Exercise and Sport* (no new articles included), and *Sport, Education and Society* (one new article included). This additional step resulted in the inclusion of 16 articles.

4.3. Reference list search

One final endeavour undertaken to ensure all relevant studies were identified was a search of the reference lists of those papers categorised as potentially relevant in the database search ($n = 244$) and those papers identified during the manual search of journals ($n = 16$). This reference list search resulted in the inclusion of two new articles. At this point a saturation point was reached whereby no further new articles were being identified.

4.4. Additional search for 2014

Because the initial database search was carried out in August 2014, a separate search was necessary in March 2015 in order to identify relevant studies published between July and December of 2014. The steps followed in the initial database search were mirrored in this procedure. To account for possible delays in publications being indexed in research databases, we searched the twelve months of 2014, rather than just the second half of the year. The key journals were also manually searched and reference lists of identifies articles were screened. This additional search resulted in the inclusion of five articles from 2014 and three further articles from the reference lists of those five articles.

The final scoping review included 96 articles. The review process is summarised in Fig. 1.

4.5. Data extraction

In endeavouring to map the identified research articles, an Excel file was created containing basic descriptive information extracted from each article (author(s), year, journal, country, participants and data sources). This table is available in Appendix A. A summary document for each article was also created, containing an overview of the research, key findings related to PE teacher educators, and a list of themes to which the article related. The included articles ranged from those with a primary focus on PE teacher educators to those with only an incidental focus on this population. Approximately one fourth of included articles, although containing PE teacher educator data, did not have PE teacher educators as their primary focus. We do not distinguish these articles in the review as we attend only to the PE teacher educator data in each article.

5. Descriptive overview

An in-depth review of 96 articles is more than can be accommodated in the space allotted to one journal article. Instead, following the intent of a scoping review, our aim in this and the next section is to provide a snapshot of the reviewed articles. We begin with a sketch of the general features of the included articles.

5.1. Countries and journals

The research informing the included articles was carried out in 15 countries and published across 25 journals. A breakdown of the numerical, geographical and journal spread across time can be found in Table 1. Readers will note that we elected to divide the twenty five years into three periods, 1990–1999, 2000–2004 and 2005–2014. This decision was made when it was noted that just four included articles were published during the five-year period 2000 to 2004 and it was felt that to add these results to either the first or last decade of the review might give a distorted view of the volume of publication at a given time. The resulting picture reveals two relatively productive decades in terms of research on PE teacher educators, with a drop in publications during the intervening five years. Comparing the first and last decade of the review, it can be seen that the last ten years

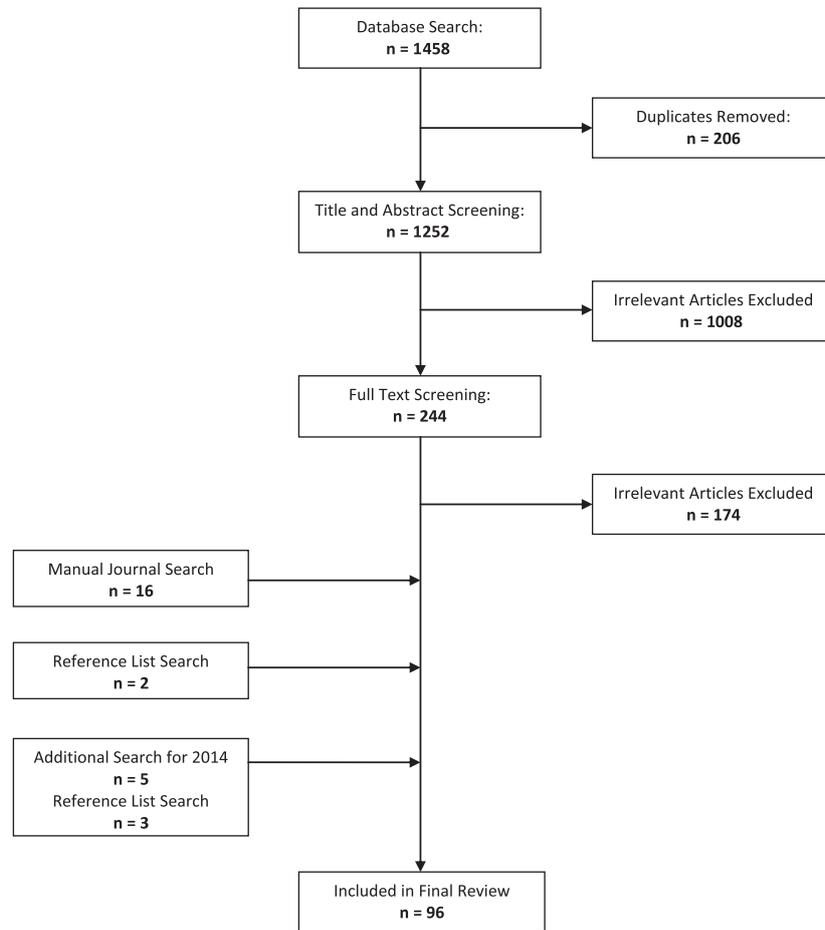


Fig. 1. The review process.

witnessed a one third higher rate of publication on this population than was seen in the first decade.

With 57 articles overall, the US was by far the most represented country, followed by Australia, New Zealand and Great Britain with seven articles each. Given that our review was limited to articles published in English this is, perhaps, unsurprising. Taking a closer look, however, we find that the majority of articles published in the US were published in the 1990s and for the first 15 years of the review the only countries represented were the US, Australia and Great Britain. Overall, PE teacher educators have become a feature of research in an increasing number of countries over time, spreading from three to 15 countries during the last ten years. It is difficult to be certain, however, whether this apparent increase in research on PE teacher educators represents an actual increase in the publication of research on this population around the world or merely an increase in such research being published in English. Despite this increase in the number of countries represented, there were just four articles based on research carried out in more than one country (Andriamampianina & Si Moussa, 2005; Casey & Fletcher, 2012; Fletcher & Casey, 2014; Peters & Shuck, 2009), in addition to two articles which, although US-based, focused on a study of an international group of PE teacher educators (Patton & Parker, 2014; Patton, Parker, & Neutzling, 2012). The variety of journals in which the articles were published also increased throughout the 25-year review period. During the first 15 years just

four articles were published in journals outside of the field of sport pedagogy and this increased to 18 articles since 2005.

5.2. Theories, participants and methods

While not all papers included a theoretical framework, the most cited theoretical lens through which results were viewed was Lawson's socialisation theory (1983a, 1983b). The variety of theories utilised expanded in the latter years of the review with authors drawing on theories such as those of Giddens (Cassidy & Tinning, 2004), Lave and Wenger (Chambers & Armour, 2011; Patton et al., 2005), Bordieu (Backman, 2008; Lisahunter, 2011; Smith, 2012), Sachs (Dowling, 2006; Ní Chróinín, Tormley, & O'Sullivan, 2012) and Hargreaves (Dowling, 2008). PE teacher educators were listed as participants in all but five articles (in these five articles heads of department or PETE programme representatives participated, providing data regarding their programmes and faculty). In the remaining 91 articles, the number of PE teacher educator participants ranged from one to 283, with 31 articles having three or fewer such participants and just 18 articles having more than 30. Interview was by far the most utilised data collection method cited (54 articles). In most cases these were individual interviews, with a number of cases of pair or focus group interviews. Questionnaires were also used frequently (33 articles). The methodological approaches employed increased in variety over

Table 1
Countries and journals of included articles.

Years	1990–2014	1990–1999	2000–2004	2005–2014
Articles	96	35	4	57
Countries	15	3	2	15
		United States (31) Australia (2) Great Britain (2)	United States (3) Australia (1)	United States (23) New Zealand (7) Ireland (5) Norway (4) Australia (3) Great Britain (3) Canada (2) Great Britain & Canada (2)
Journals	25	9	3	22
		Journal of Teaching in Physical Education (15) Physical Educator (10) Research Quarterly for Exercise and Sport (3) Journal of Physical Education, Recreation and Dance (2) Australian Journal of Education (1) European Physical Education Review (1) Physical Education and Sport Pedagogy (1) Teaching & Teacher Education (1) Teaching Education (1)	Physical Educator (2) Journal of Teaching in Physical Education (1) Teaching Education (1)	Journal of Teaching in Physical Education (14) Physical Education and Sport Pedagogy (7) Australian Journal of Teacher Education (6) Sport, Education and Society (6) Physical Educator (3) Educational Action Research (2) European Physical Education Review (2) Research Quarterly for Exercise and Sport (2) Teaching and Teacher Education (2) ACHPER – Health Lifestyles Journal (1) Asia–Pacific Journal of Health, Sport & Physical Education (1) Canadian Journal of Education (1) Dental Traumatology (1) European Journal of Teacher Education (1) ICHPER-SD Journal of Research (1) International Review of Education (1) Irish Educational Studies (1) Mentoring & Tutoring (1) Palaestra (1) Quest (1) Studying Teacher Education (1) Teacher Development (1)

time with interview and survey dominating the early years and later years witnessing an increasing number of scholars using action research, self-study, autoethnography, visual ethnography and narrative inquiry. Approximately one third of articles published in the final ten years of the review focused on the authors' own professional practices or experiences, compared to just one tenth of articles published in the previous 15 years.

6. Thematic overview

The individual article summaries created during the data extraction phase of the review process allowed us to determine what themes, relative to PE teacher educators, were addressed in each article. Recognising the reductionism inherent in the thematic separation of data, we endeavour in the following overview to highlight not just where a theme is encountered as a focal point in an article but also where the theme is less pronounced, such that articles often appear under numerous themes. For example, although an article may focus on the demographics of PE teacher educators, it might also investigate their perspectives on PETE programmes. In this case it would appear under the 'demographics' theme and the 'perspectives' theme. We now present a brief overview of the review articles according to the identified themes. Table 2 provides a summary of articles focussing on each theme, whether explicitly or incidentally.

6.1. Demographics

A number of articles examined the demographic make-up, qualifications and rank of PETE faculty in the US and all but one

through some form of questionnaire survey. Crase, Evans, Overby, and Wilkens (1991) and Steir and Quarterman (1992) limited their studies to PETE faculty at historically black colleges and universities, while Piletic and Davis (2010) focused specifically on faculty delivering the Introduction to Adapted Physical Education course within PETE programmes. Boyce and Rikard (2011) attended to faculty at PETE doctoral programmes, the numbers of whom were also given minor attention by Ward, Parker, Sutherland, and Sinclair (2011). Other papers (Ayers & Housner, 2008; Hetland & Strand, 2012; Woods, Phillips, & Carlisle, 1997) looked at the demographics of the wider population of US PE teacher educators. Although faculty demographics were not the main focus for the study of Goc Karp, Williamson, and Shifflett (1996), they were the only authors to provide additional information in terms of the family backgrounds of PE teacher educators. Collectively, these articles point to a gradual redressing of a noted gender imbalance among US PETE faculty, in terms of both qualifications and rank, while highlighting a persistent lack of diversity in the profession. Beyond the US, the only paper to focus on PETE faculty demographics was that of Melnychuk, Robinson, Lu, Chorney, and Randall (2011) in Canada.

6.2. Biographies and careers

In addition to compiling data on the demographics of PE teacher educators in the US, Woods et al. (1997) included a focus on their participants' career paths. The articles of Yang and Elliott (1999) and Dodds (2005) centred on the careers of female PE teacher educators. The former examined the career socialisation of ten female professors of adapted physical education/activity and the latter probed the link

Table 2
Thematic overview of included articles.

Theme		... as a primary focus in article		... as a secondary focus in article
Demographics	USA	Ayers and Housner (2008)	USA	Crase et al. (1991)
	USA	Boyce and Rikard (2011)	USA	Piletic and Davis (2010)
	USA	Hetland and Strand (2012)	USA	Goc Karp et al. (1996)
	CAN	Melnychuk et al. (2011)	USA	Ward et al. (2011)
	USA	Steir and Quarterman (1992)		
	USA	Woods et al. (1997)		
Biographies, careers	USA	Cazers and Curtner-Smith (2013)	USA	Lee and Curtner-Smith (2011)
	USA	Cole and Smith (2014)	AUS	McMahon and Huntly (2013)
	USA	Cutforth (2013)	USA	Woods et al. (1997)
	USA	Dodds (2005)		
	USA	Graber and Schempp (2000)		
	USA	Yang and Elliott (1999)		
Socialisation	GBR/CAN	Casey and Fletcher (2012)	USA	Bower (2007)
	USA	Dodds (2005)	USA	Cazers and Curtner-Smith (2013)
	USA	Graber (1993)	USA	Cole and Smith (2014)
	USA	Lee and Curtner-Smith (2011)	USA	Cutforth (2013)
	USA	Parker et al. (2011)	CAN	Fletcher and Bullock (2012)
	USA	Williamson (1993)	CAN/GBR	Fletcher and Casey (2014)
	USA	Yang and Elliott (1999)	USA	Ward et al. (2011)
	USA		USA	Williamson and Stroot (1994)
Knowledge/ Understanding	USA	Graham, French, and Woods (1993)	USA	Graber and Schempp (2000)
	USA	Housner et al. (1993a)	USA	Norback and Wattay (1994)
	USA	Housner et al. (1993b)	USA	Rink et al. (1994)
	BRA	Jorge et al. (2009)		
	USA	Patton and Parker (2014)		
	USA	Patton et al. (2012)		
	USA	Silverman et al. (2014)		
	NOR	Dowling (2006)	NZL	Bruce (2013)
	NOR	Dowling (2008)	GBR/CAN	Casey and Fletcher (2012)
	NOR	Dowling and Kårhus (2011)	CAN	Fletcher and Bullock (2012)
	AUS	Macdonald (1993)	CAN/GBR	Fletcher and Casey (2014)
	AUS	Macdonald and Tinning (1995)	NZL	Garbett and Ovens (2012)
	NOR	Mordal-Mohen and Green (2014)	USA	Gubacs-Collins (2007)
	ESP	Muros Ruiz and Fernández-Balboa (2005)	GBR	Pearson (2011)
Perspectives	CHN/FRA	Andriamampianina and Si Moussa (2005)	USA	Lavay et al. (2012)
	SWE	Backman (2008)	GRE	Makopoulou and Armour (2011)
	GBR	Carney and Armstrong (1996)	AUS	Perلمان et al. (2012)
	GBR	Carney and Guthrie (1999)		
	USA	Coffin (1994)		
	USA	Hill et al. (2012)		
	USA	Johnson (2000)		
	USA	Lund et al. (2007)		
	CAN	Melnychuk et al. (2011)		
	IRL	Ní Chróinín et al. (2012)		
	IRL	Ní Chróinín, O'Sullivan, and Tormey (2013)		
	USA	Patton and Parker (2014)		
	USA	Parker et al. (2011)		
	GBR	Vickerman (2007)		
Professional contexts	MYS/AUS	Andriamampianina and Si Moussa (2005)	GBR	Carney and Guthrie (1999)
	SWE	Backman (2008)	USA	Cazers and Curtner-Smith (2013)
	NOR	Dowling (2008)	USA	Cole and Smith (2014)
	NOR	Dowling and Kårhus (2011)	NOR	Dowling (2006)
	USA	Graber (1993)	USA	Mitchell (2000)
	USA	Graber (1996)	NOR	Mordal-Moen and Green, (2014)
	AUS	Macdonald (1993)	IRL	Ní Chróinín et al. (2012)
	AUS	Macdonald and Tinning (1995)	IRL	Ní Chróinín, O'Sullivan, et al. (2013)
	CAN	Melnychuk et al. (2011)	USA	Parker et al. (2011)
	USA	Pennington et al. (2014)	USA	Woods et al. (1997)
	USA	Prusak et al. (2010)		
	BWA	Shehu (2009)		
	NZL	Smith (2012)		
	Role expectations	USA	Goc Karp et al. (1996)	USA
USA		Williamson (1990a)	USA	Cutforth (2013)
USA		Williamson (1993)	USA	Crase et al. (1991)
USA		Woods et al. (1997)	USA	Graber and Schempp (2000)
USA		Yang and Elliott (1999)	BWA	Shehu (2009)
			CAN	Melnychuk et al. (2011)
			USA	Mitchell (1992b)
			USA	Mitchell (1997)
			USA	Steir and Quarterman (1992)
			USA	Williamson (1990b)

(continued on next page)

Table 2 (continued)

Theme		... as a primary focus in article		... as a secondary focus in article
Pedagogy in general	AUS	Cassidy and Tinning (2004)	USA	Graham et al. (1993)
	USA	Graber (1990)	USA	Housner et al. (1993a)
	USA	Graber (1995)	USA	Housner et al. (1993b)
	USA	Graber and Schempp (2000)	USA	Johnson (2000)
	USA	Goc Karp and Peterson (1991)	USA	Lee and Curtner-Smith (2011)
	USA	Lavay et al. (2012)	NOR	Mordal-Moen and Green (2014)
	ESP	Muros Ruiz and Fernández-Balboa (2005)	USA	Rink et al. (1994)
	USA	Savage and Sharpe (1998)		
	USA	Wandzilak et al. (1994)		
Pedagogy of author(s)	USA	Bruce (2013)		
	GBR/CAN	Casey and Fletcher (2012)		
	IRL	Deenihan et al. (2011)		
	ESP	Fernández-Balboa (1998)		
	CAN	Fletcher and Bullock (2012)		
	CAN/GBR	Fletcher and Casey (2014)		
	NZL	Garbett and Ovens (2012)		
	USA	Gubacs-Collins (2007)		
	NZL	Legge (2011)		
	NZL	Legge (2014)		
	NZL	Legge and Smith (2014)		
	AUS	lisahunter (2011)		
	ESP	Lorente and Kirk (2013)		
	AUS	McMahon and Huntly (2013)		
	IRL	Ní Chróinin, Mitchell, et al. (2013)		
GBR	Pearson (2011)			
MYS/AUS	Peters and Shuck (2009)			
Working with teachers, schools and communities	IRL	Chambers and Armour (2011)	USA	Crase et al. (1991)
	USA	Coffin (1994)	USA	Sparks and Steffen (1990)
	USA	Cutforth (2013)	USA	Graber (1996)
	GRE	Makopoulou and Armour (2011)	USA	Pennington et al. (2014)
	USA	Parker et al. (2010)	USA	Prusak et al. (2010)
	USA	Patton and Parker (2014)	USA	Williamson (1990a)
	USA	Patton et al. (2005)		
	USA	Patton et al. (2012)		
	NZL	Petrie et al. (2014)		
	USA	Rovegno and Bandhauer (1998)		
	USA	Sharpe (1992)		
	USA	Sharpe et al. (1999)		
	GBR	Webb and Scoular (2011)		
	USA	Williamson (1990b)		
Research in general	USA	Mitchell (1992a)	USA	Goc Karp et al. (1996)
	USA	Mitchell (1992b)	USA	Hetland and Strand (2012)
	USA	Mitchell (1997)	AUS	Macdonald (1993)
	USA	Silverman et al. (2014)	BWA	Shehu (2009)
			USA	Woods et al. (1997)
		USA	Williamson (1990a)	
Research of authors	USA	Bruce (2013)	NZL	Garbett and Ovens (2012)
	USA	Cutforth (2013)	GBR	Gubacs-Collins (2007)
	CAN/GBR	Fletcher and Casey (2014)	CAN	Fletcher and Bullock (2012)
	NZL	Legge (2014)	GBR	Pearson (2011)
	USA	Patton et al. (2005)	NZL	Petrie et al. (2014)
	USA	Rovegno and Bandhauer (1998)		
	GBR	Webb and Scoular (2011)		
	USA	Williamson and Stroot (1994)		

between the biographies, careers and socialisation of 54 female PE teacher educators, with a specific focus on participants' experiences of being mentored as children, adolescents and as teacher educators. Most other studies of the biographies or careers of PE teacher educators focused on just one participant. Life history methodology was employed by [Cazers and Curtner-Smith \(2013\)](#) to provide an in-depth exploration of the biography and career of a retired African American PETE professor, and by [Cole and Smith \(2014\)](#) in their study of a PE teacher educator with an impairment. Both papers discussed the marginalisation and discrimination encountered by these pioneering individuals throughout their personal and professional lives and how they experienced and confronted these issues. [Cutforth's \(2013\)](#) autoethnography of his journey to become a community-engaged scholar provided insight into the career path of one PETE scholar and how he balanced his passion for community engagement and

related research with his attempts to secure tenure and satisfy sometimes discrepant institutional demands. The biography of a generalist-trained PE teacher educator and how her students perceived the impact of her teaching were the topic of [Graber and Schempp's \(2000\)](#) study, which illustrated the influential interaction between biography and pedagogy. This interaction was also a focus for [McMahon and Huntly \(2013\)](#) in their presentation of the connection between their past bodily experiences and their present embodied pedagogy. The contribution of McMahon and Huntly was the only non-US article to attend to the biographies of PE teacher educators with none focussing on the career paths of this population.

6.3. Socialisation

Connected to the personal and career paths of PE teacher

educators is their socialisation into the profession. Many of the articles listed in the previous sub-section also focused on the occupational socialisation of their protagonists (Cazers & Curtner-Smith, 2013; Cole & Smith, 2014; Cutforth, 2013; Dodds, 2005; Yang & Elliott, 1999). Further, Graber (1993) investigated the occupational socialisation of a group of faculty in a high impact PETE programme, drawing attention to how faculty consensus was continuously refined, reinforced and maintained. Williamson (1993) described the organisational socialisation experiences of five female PE teacher educators (including herself) in their initial years as assistant professors of PE as they grappled with a sense of role ambiguity and lack of support structures. Mentoring was a subject of interest for Bower (2007) in her examination of the mentoring relationships between heads of department and first-year faculty. Although the data in this article is from the perspective of department heads rather than faculty, data on the participants' past experiences as protégés are linked to their current roles as mentors. The study of Lee and Curtner-Smith (2011) sought to determine the impact of occupational socialisation on the beliefs and practices of 12 sport pedagogy doctoral students, finding that the students' graduate education had a particularly strong impact on their orientations (participants' career paths were also discussed). This paper was complimented by that of Parker, Sutherland, and Sinclair (2011), who solicited opinions of the PETE professoriate regarding how well US PETE doctoral programmes prepare future faculty. Casey and Fletcher (2012) also contributed to this theme through an examination of their own transitions from teaching, through doctoral studies, to teacher education. The socialisation of doctoral students and early career PE teacher educators was also a focus, albeit tangential, in other articles (Fletcher & Bullock, 2012; Fletcher & Casey, 2014; Ward et al., 2011; Williamson & Stroot, 1994).

6.4. Knowledge and understanding

The 1990s saw the publication of a number of articles in which PE teacher educator participants engendered the role of expert, with data on their pedagogical knowledge being elicited in order to be compared with those of pre-service teachers to gain an insight into how PE knowledge develops (Graham, French, & Woods, 1993; Housner, Gomez, & Griffey, 1993a, 1993b; Rink, French, Lee, Solmon, & Lynn, 1994). Further, Graber and Schempp (2000), through an examination of the pedagogy of one generalist-trained PE teacher educator, demonstrated how a restricted knowledge base can negatively affect the impact of teacher education on pre-service teachers. Norback and Wattay (1994), in their effort to determine what knowledge was important for newly licenced PE teachers, also relied on PE teacher educators' expertise, providing an interesting insight into how different areas of knowledge were prioritised by PE teacher educators at the time. What knowledge is valued by PE teacher educators was a question explored in varying degrees of depth by a number of authors through the years (Andriamampianina & Si Moussa, 2005; Backman, 2008; Dowling, 2006; Dowling & Kärhus, 2011; Macdonald, 1993; Macdonald & Tinning, 1995; Melnychuk et al., 2011; Mordal-Moen & Green, 2014). In addition to studies related to the knowledge of PE teacher educators on their subject matter, their knowledge of other topics was also assessed. The collective knowledge of an international group of PE teacher educators on the facilitation of professional development opportunities for teachers was interrogated by Patton et al. (2012) and Patton and Parker (2014). Silverman, Hodges Kulinna, and Philips (2014) carried out research on US-based PE teacher educators' knowledge of journals and perceptions of journal quality, while Jorge et al. (2009) sought to determine the knowledge of PE teachers and teacher educators in Brazil regarding first aid measures for tooth avulsion.

Given that there is a fine line between knowledge and understanding, we chose to combine the two in this theme. While articles listed in the previous paragraph dealt explicitly with the knowledge of PE teacher educators, others crossed the boundaries of knowledge and understanding. Muros Ruiz and Fernández-Balboa (2005) interviewed Spanish PE teacher educators regarding the definition, principles and purposes of critical pedagogy, finding, in many cases, their knowledge and understanding to be inadequate, and inconsistent with the literature. In Norway, Dowling carried out in-depth interviews with PE teacher educators (Dowling, 2006, 2008; Dowling & Kärhus, 2011), finding that they understood their roles to be those of transmitters of predefined, unproblematic PETE knowledge. Further, their level of understanding of gender issues in PETE and PE were found to be somewhat lacking, rooted in their biographies, webs of emotions and common-sense understandings rather than being theoretically informed. These findings echoed those of an earlier Australian case study (Macdonald, 1993; Macdonald & Tinning, 1995) which revealed a proliferation of technocratic discourses among PETE faculty and unproblematised understandings. Mordal-Moen and Green (2014) also discovered somewhat unreflexive understandings among PE teacher educators in Norway, as well as consistent privileging of the practical over the reflective in their discourses. Acting as something of a counterbalance to the seemingly negative findings of these studies, a number of articles in which PE teacher educators investigated their own pedagogy, through self-study or action research, included detailed explanations of how their existing knowledge and understanding of pedagogy, of their subject matter, or of knowledge itself, was positively transformed through the process of their research (Bruce, 2013; Casey & Fletcher, 2012; Fletcher & Bullock, 2012; Fletcher & Casey, 2014; Garbett & Ovens, 2012; Gubacs-Collins, 2007; Pearson, 2011).

6.5. Perspectives

The perspectives of PE teacher educators were explored on various topics and in a number of countries. PE teacher educators in the US were questioned regarding their views on school/university collaborations (Coffin, 1994), the appropriateness of co-educational PE (Hill, Hannon, & Knowles, 2012), dispositions important for success in the teaching of PE (Lund, Wayda, Woodard, & Buck, 2007), the importance of behaviour management content in PETE (Lavay, Henderson, French, & Guthrie, 2012), the status and content of undergraduate gymnastics courses (Johnston, 2000), and the content of US PETE doctoral programmes (Parker et al., 2011). The perspectives of non-US PE teacher educators were also sought regarding their PETE programmes. Among British PE teacher educators, the focus was on participants' views regarding the preparation of teachers to teach PE in primary schools (Carney & Armstrong, 1996; Carney & Guthrie, 1999) and the preparation of teachers for the inclusion of children with special educational needs within PE (Vickerman, 2007). In Canada, PE teacher educators were asked to share their views on appropriate content for PETE programmes (Melnychuk et al., 2011). Similarly, Andriamampianina and Si Moussa (2005) explored perspectives of French and Chinese PE teacher educators regarding PE and PETE in their respective countries, as well as their suggestions for improvements to PETE. Patton and Parker's (2014) article explored the views of an international group of facilitators regarding what constitutes successful professional development, a topic similarly explored by Makopoulou and Armour (2011) in Greece. The opinions of Irish PE teacher educators were elicited regarding recently compiled, unofficial beginning teacher standards for PE, and how such standards might be implemented (Ní Chróinín et al., 2012; Ní Chróinín,

O'Sullivan, et al., 2013). Perlman, Forest, and Pearson (2012) consulted Australian PE teacher educators in their consideration of the suitability of movement-based gaming technologies within PE learning contexts, while Swedish PE teacher educators were represented in the investigation of Backman (2008) into their perspectives on the values associated with, and nature of, friluftsliv (encompassing activities similar to outdoor education), with a particular interest in how it related to sport within PETE in Sweden.

6.6. Professional contexts and role expectations

A number of studies investigated the context of high-impact PETE programmes, i.e., those programmes that have been seen to demonstrate a powerful influence over the beliefs and practices of pre-service teachers. These studies provide historical descriptions of how faculty in these institutions built coherent PETE programmes with a strong sense of purpose, faculty consensus and sustained impact (Graber, 1993, 1996; Pennington, Prusak, & Wilkinson, 2014; Prusak, Pennington, Vincent Graser, Beighle, & Morgan, 2010). Mitchell (2000) added to this work with an assessment of programme coherence in one US PETE programme. The powerful influence of professional context on the experiences, understandings and practices of PE teacher educators was also of interest to a number of other authors (Andriamampianina & Si Moussa, 2005; Backman, 2008; Dowling, 2006; Dowling & Kärhus, 2011; Macdonald, 1993; Macdonald & Tinning, 1995; Melnychuk et al., 2011; Mordal-Moen & Green, 2014). These studies are particularly illustrative of how privileged discourses within a faculty and beyond can impact the selective prioritisation of certain knowledge and practices, and present significant barriers to anyone wishing to challenge them. Differing logics of practice were a focal point for Smith's (2012) account of how health and PE teacher educators, within a faculty of education in a New Zealand university, resisted attempts to merge with a department of sport and exercise science. Cazers and Curtner-Smith (2013) and Cole and Smith (2014) also demonstrated, through their life history investigations of PE teacher educators, how context can be a powerful factor in professional experiences. In Botswana, Shehu (2009) touches on the institutional and national contextual factors which impinge on the professional development opportunities available to PE teacher educators. One gap in the research regarding professional contexts is a lack of direct interrogations of the interaction between PE teacher educators and the broader national social, political and educational contexts within which they work. This topic was addressed to some degree in various papers (see, for example, Andriamampianina & Si Moussa, 2005; Carney & Guthrie, 1999; Dowling, 2006; Graber, 1996; Melnychuk et al., 2011; Mordal-Moen & Green, 2014; Parker et al., 2011; Ní Chróinín et al., 2012 and Ní Chróinín, O'Sullivan, et al., 2013), but rarely within the PE teacher educator data itself.

The workload and role orientations of PE teacher educators seem particularly bound with institutional and programmatic priorities and the expected balance to be struck between teaching, research and service responsibilities. Institutional expectations regarding workload and role orientations were illustrated by Boroviak (1990), Crase et al. (1991), Goc Karp et al. (1996), Steir and Quarterman (1992) and Woods et al. (1997). Various articles shared PE teacher educators' experiences of balancing such responsibilities (Cutforth, 2013; Graber & Schempp, 2000; Melnychuk et al., 2011; Mitchell, 1992b, 1997; Shehu, 2009; Williamson, 1990a, 1990b, 1993; Yang & Elliott, 1999). In some of these cases the role orientations or professional priorities of PE teacher educators were deemed not to match institutional expectations (e.g. Cutforth, 2013; Melnychuk et al., 2011; Shehu, 2009). To conclude our review, we will now summarise the research pertaining to the three

main responsibilities with which PE teacher educators are tasked: pedagogy, service and research.

6.7. Pedagogy

Leaving aside the articles on pedagogical knowledge mentioned in section 6.4, the articles focused on the pedagogical practice of PE teacher educators can be divided into two types. First are those articles in which the authors investigated the pedagogy of PE teacher educators other than themselves. Graber (1990), for example, examined how the instructional practices of three PE teacher educators were affected by their perceptions of their students' agenda for a given course. In a later study focused on the knowledge, beliefs and practices of pre-service teachers at two universities (Graber, 1995), she found that the instructional practices of one PE teacher educator had a particularly positive influence on the beliefs of the pre-service teachers. Graber and Schempp (2000) subsequently illustrated the consequences of less effective pedagogical endeavours demonstrated by a generalist-trained PE teacher educator. The disparity between the pedagogical intentions of an Australian PE teacher educator and the impact of his pedagogy on the practice of one of his students was investigated by Cassidy and Tinning (2004). A disparity between intentions and potential outcomes was also noted by Muros Ruiz and Fernández-Balboa (2005), who found that the Spanish PE teacher educators they interviewed, although believing themselves to be practicing critical pedagogy, were not in fact enacting this form of pedagogy in a manner consistent with the related literature. Goc Karp and Peterson (1991) concentrated their research on the use of questioning in the pedagogical practices of eight PE professors, while Wandzilak, Bonnsetter, and Mortensen (1994) and Savage and Sharpe (1998) took an interventionist approach, attempting to improve the teaching behaviours of seven PE professors and one graduate teaching assistant, respectively. Lavay et al. (2012) investigated the behaviour management instructional practices of 134 PE teacher educators, eliciting their recommendations for improved practice in this area. Finally, Mordal-Moen and Green (2014) sought to determine the place of reflexivity in the pedagogical philosophies and practices of PE teacher educators in Norway.

The second type of article in this section is that in which the authors investigated their own pedagogical practices or those of their co-authors. Many elucidate how they endeavoured to communicate, enact or promote specific concepts and practices, such as critical pedagogy (Fernández-Balboa, 1998) and related alternative assessment practices (Lorente & Kirk, 2013), models-based practice (Deenihan, MacPhail, & Young, 2011; Fletcher & Casey, 2014; Gubacs-Collins, 2007; Peters & Shuck, 2009), experiential learning (Legge & Smith, 2014), physical literacy (Fletcher & Bullock, 2012), peer-teaching (Garbett & Ovens, 2012), and an appreciation and understanding of indigenous movement activities (Legge, 2011, 2014). Ní Chróinín, Mitchell, et al. (2013) explored pre-service students' and lecturers' experiences of learning encounters in three 'practical' subjects (PE, music and art), while Casey and Fletcher (2012) gave a more general account of the learning and un-learning necessitated as they adjusted their pedagogy from that which they had previously practiced as school teachers (an issue also discussed in Fletcher and Casey (2014)). Pedagogical transformation was also a salient theme for Bruce (2013) and Pearson (2011). Bruce explained the shifts in understanding she experienced through her participation in a self-study project, which resulted in her moving from critical to postcritical pedagogical thinking and practice. Pearson illustrated how her action research allowed her to move from a pedagogy of knowledge transfer to one of knowledge co-creation. The narrative research of McMahon and Huntly (2013) highlighted how the body is implicated in PE teacher educators' pedagogical practice, an idea also embraced in the article

of [lisahunter \(2011\)](#), although in this latter case the weight of emphasis falls less on the embodiment of the author's own praxis than on that of her pre-service students.

6.8. Working with teachers, schools and communities

As there was not a large body of research on PE teacher educators' service role per se, under this theme we have grouped those articles that explored PE teacher educators' involvement in collaborative projects with teachers and schools, professional development, teaching practice supervision and community work. There was a sense of logic and consistency within the papers dealing with the relationships between PE teacher educators and practicing teachers in specific collaborative projects ([Coffin, 1994](#); [Petrie, Burrows, & Cosgriff, 2014](#); [Rovegno & Bandhauer, 1998](#); [Webb & Scoular, 2011](#)) and in long-term professional development projects ([Parker, Patton, Madden, & Sinclair, 2010](#); [Patton et al., 2005](#)). The findings tended to echo each other, emphasising the importance of mutual respect, trust, recognition of individual expertise, and working towards common goals. Other articles explored the knowledge and experiences of PE teacher educators as professional development facilitators in more general terms, assessing what they viewed as characteristic of successful professional development ([Makopoulou & Armour, 2011](#); [Patton & Parker, 2014](#); [Patton et al., 2012](#)).

The significance of close collaborative relationships between university PETE faculty and school staff was highlighted in discussions regarding the importance of consistency between the pedagogical messages imparted by PE teacher educators during teacher education and those encountered by pre-service and in-service teachers when they work in schools. This was emphasised in a number of articles detailing successful collaborations between universities and school districts in the US ([Graber, 1996](#); [Pennington et al., 2014](#); [Prusak et al., 2010](#); [Sharpe, 1992](#); [Sharpe, Lounsbury, Golden, & Deibler, 1999](#)). [Williamson \(1990b\)](#) also explored the relationships between PE teacher educators and co-operating teachers and their schools, finding that a hierarchical barrier existed between the two. To compound the issue, she found that the role of the PE teacher educator as supervisor of teaching practice was seen to be undervalued within the institutional contexts of her 15 participants (1990a). [Sparks and Steffen \(1990\)](#) surveyed the PE teaching practice supervision practices and policies across 178 institutions in the US, providing data on the PETE personnel responsible for such supervision. The only included article since 1990 with a particular focus on teaching practice supervision was that of [Chambers and Armour \(2011\)](#) who studied a teaching practice cohort in Ireland, finding there to be a discrepancy between the espoused and enacted teacher education principles of participating PE teacher educators, co-operating teachers and school principals.

The community engagement of PE teacher educators was a subject which garnered very little scholarly attention within the reviewed articles other than an acknowledgement of its importance in traditionally black institutions ([Cruse et al., 1991](#)) and [Cutforth's](#) detailed portrait of his professional journey as a community-engaged scholar (2013).

6.9. Research

What we know about how and why PE teacher educators engage in research is largely due to the work of [Mitchell \(1992a; 1992b; 1997\)](#). This author first traced the academic genealogy of a number of major contributors to the *Journal of Teaching in Physical Education (1992a)* before investigating the scholarly behaviours of PE methods teacher educators in Ohio, probing their reading, writing, attendance at professional conferences and involvement in

research (1992b). Returning to the participants of the first study, he then interviewed the most prolific publishers among them to determine what motivated, helped and hindered their publication endeavours (1997). Beyond these papers, there were no articles in the review explicitly focused on the research practices of PE teacher educators in general. The assessment of [Silverman et al. \(2014\)](#) of PE teacher educators' knowledge and perception of journals certainly pertains to the scholarly aspect of the population, and among some studies there were references to publication rates and institutional expectations regarding research outputs ([Goc Karp et al., 1996](#); [Hetland & Strand, 2012](#); [Macdonald, 1993](#); [Shehu, 2009](#); [Woods et al., 1997](#); [Williamson, 1990a](#)). However, we identified no studies centred solely on the research work of PE teacher educators for close to 20 years.

The difficulty of this relative absence of general data about PE teacher educators as researchers was somewhat assuaged by a number of articles written by PE teacher educators in which they included an elaboration on the effects and experiences of their own participation in research, whether such research was focused on their own practices and experiences ([Bruce, 2013](#); [Cutforth, 2013](#); [Fletcher & Casey, 2014](#); [Legge, 2014](#); [Williamson & Stroot, 1994](#)) or collaborative projects with others ([Patton et al., 2005](#); [Rovegno & Bandhauer, 1998](#); [Webb & Scoular, 2011](#)). Authors such as [Casey and Fletcher \(2012\)](#), [Fletcher and Bullock \(2012\)](#), [Garbett and Ovens \(2012\)](#), [Gubacs-Collins \(2007\)](#) and [Pearson \(2011\)](#) further contributed to this theme, although less explicitly, through their inclusion, in their pedagogy-focused articles, of insights regarding the professional benefits of participating in self-study or action research.

7. Conclusion

The experience of carrying out this review has taken us on a scholarly journey. As we explored PE teacher educator research through the years, we watched it embrace new methodologies and theories and emerge from an expanding array of publication outlets and countries. We have attempted in this paper to draw a research map which we hope others can use to navigate this body of scholarly work. We will now conclude with some observations from the review and suggestions for future inquiry.

The bias of English language publications notwithstanding, there has certainly been a much stronger focus on PE teacher educator research in the US than elsewhere, with many early articles deriving their research questions from the agenda set out by [Lawson \(1991\)](#). Research interest in this population in other countries has been recent (all but five non-US studies were published since 2005) and centred in many cases on the professional practice and learning of its authors (17 of the 39 non-US articles). While a wealth of data has been collected on US PE teacher educators, a number of themes have received little attention elsewhere. We know very little about the demographic make-up, biographies, careers, socialisation, or work roles of PE teacher educators beyond North America. Research into the knowledge, understanding and perspectives of PE teacher educators enjoyed a more balanced geographical representation, as did scholarship on the pedagogical practices of this population and their work with in-service teachers and schools. Their community work, on the other hand, was less represented among the included articles. Although the context within which PE teacher educators work was a focus in a number of articles, more pointed explorations of the interaction between PE teacher educators and these contexts, and indeed, wider policy and education contexts, may improve our understanding of the networks of influence PE teacher educators work within, co-construct or navigate, and how these networks affect their professional practice. [Kárhús \(2012\)](#), for example, provides a useful interrogation of how professional contexts within the field of higher

education sport and PE interact with institutional pedagogical discourses, although their participants were heads of department and deans rather than PE teacher educators per se. Of the research foci suggested by Lawson (1991), one that received scant attention in the included literature was that of the paradigmatic and occupational communities to which PE teacher educators belong. Finally, although we know something of the experiences of PE teacher educators in research projects in which they engaged, and their subsequent professional learning, it has been almost 20 years since research explicitly investigated how, why or to what end PE teacher educators enact the scholarly aspect of their professional work. This gap in our knowledge is particularly troublesome considering that the research endeavours of PE teacher educators contribute substantially to the knowledge base of the field.

Given that approximately one third of the included articles had three or fewer PE teacher educators as participants and just 18 had more than 30, much of what we can assert to know about this population is both context and subject specific, precluding the possibility of general claims. Outside of North America, little research has been carried out on the PE teacher education profession as a whole, either within or between countries. This is not to impugn the value of studies involving one or a few participants. We merely mean to suggest that larger quantitative studies have the potential to inform the results of smaller-scale subject- or context-specific studies, and vice versa. Advances in communication technology and strengthening networks of national and international physical education research associations (such as the International Association of Physical Education in Higher Education, and relevant special interest groups of the American, British and European Educational Research Associations and the Australian Association for Research in Education) could be drawn upon to co-ordinate large-scale national and international research on PE teacher educators. International and longitudinal research was particularly notable by its dearth in this review.

The valuable research that has begun to emerge from PE teacher educators investigating their own practice, reflecting a similar trend in teacher education generally (Loughran, Hamilton, LaBoskey, & Russell, 2004), is a very promising aspect of the literature. Self-studies, action research, narrative inquiry and autoethnography offer a window into the lived experiences, thinking and practices of PE teacher educators, while facilitating the professional learning of their originators in the process. In the area of pedagogy, specifically, we identified 17 articles in which the authors' own pedagogical practice was under investigation. Of these articles, all

but one of which were published since 2007, seven were self-studies, three used action research, three reported using autoethnography, one visual ethnography, one narrative inquiry and the other two did not mention a specific methodological approach. It seems that a critical mass is building such that, at the current rate of publication, a consolidation of this research may be warranted in the near future through, for example, some form of qualitative systematic review. Qualitative data synthesis is a burgeoning methodological field and there are numerous options for those wishing to mobilise and combine knowledge from individual cases (see Barnett-Page and Thomas (2009) for a critical overview of methods of qualitative synthesis). Following Zeichner (2007), we suggest that any synthesis of evidence from practitioner inquiry focus on a particular research issue in order to contribute to a broader research agenda. A co-ordinated effort by those PE teacher educators involved in practitioner inquiry could allow individual PE teacher educators interested in a particular theme or area of practice to engage in an agreed form of practitioner inquiry. This would facilitate the professional learning and improved practice of the involved PE teacher educators while simultaneously contributing to an eventual synthesis of findings.

To conclude, we repeat a question posed by Lawson 25 years ago (1991, p. 230), 'To what extent will past and present investigations provide the foundation for an additive and integrative research enterprise?' We hope that this review can be used as a discussion document among PE teacher educators and policy makers, allowing them to determine what research questions are worth pursuing and, crucially, how to co-ordinate research efforts so that all relevant questions are investigated in the most appropriate and methodologically sound manner. It is imperative that individual research studies contribute to a broader national or international research agenda.

Acknowledgements

This work was made possible through funding received from the Ministry of Education and Culture, Finland.

Appendix A. Details of included articles (in chronological order)

Authors	Publication	Country	Aim	Participants	Data sources
Boroviak (1990)	Physical Educator	USA	To examine policies and procedures used in the administration of PE graduate assistantship programmes.	60 heads of department	Questionnaire
Graber (1990)	Journal of Teaching in Physical Education	USA	To examine how teacher educators' perceptions of their students' classroom agenda shape the ways in which instructional demands are defined, communicated, and enforced or relented.	3 PE teacher educators and their students	Nonparticipant observation, formal and informal interviews, document analysis
Sparks and Steffen (1990)	Physical Educator	USA	To examine the student teaching component of pre-service PETE programmes across the US and compare the characteristics of these programmes with those recommended by the guidelines of the Association of Teacher Educators.	Persons responsible for PE clinical experience supervision at 178 institutions	Questionnaire
Williamson (1990a)	Physical Educator	USA	To relate the experiences of PE teacher educators in their professional roles to the perceived institutional expectations and reward structure.	15 PE teacher educators	In-depth individual interviews

(continued)

Authors	Publication	Country	Aim	Participants	Data sources
Williamson (1990b)	Journal of Teaching in Physical Education	USA	To explore how PE teacher educators perceive (a) their relationships with cooperating teachers and the public schools, and (b) the dichotomy between teaching as performed in the schools and the idealized conception of teaching portrayed in professional preparation programmes.	15 PE teacher educators	In-depth individual interviews
Cruse et al. (1991)	Journal of Physical Education, Recreation and Dance	USA	To gather information that would help highlight contributions of traditionally black institutions to the profession of PE as well as identify unique problems and concerns endemic to these institutions.	40 department chairs	Questionnaire
Goc Karp and Peterson (1991)	Physical Educator	USA	To investigate the use of questioning behaviours and strategies by PE professors in undergraduate PE courses.	8 PE professors	Videotaped lessons, questionnaires, student exams
Mitchell (1992a)	Journal of Teaching in Physical Education	USA	To identify the elders in PETE and to trace their academic genealogy.	44 major contributors to JTPE from 1981 through 1989	Data sent by participants in response to list of questions
Mitchell (1992b)	Journal of Teaching in Physical Education	USA	To examine how PE methods teacher educators meet their responsibility to stay current in their professional areas and what the professional implications of these efforts are.	40 PE methods teacher educators	Individual interviews
Sharpe (1992)	Journal of Physical Education, Recreation and Dance	USA	To describe collaboration between the University of Nebraska and local schools to implement a clinically based professional development model.	4 PE teacher educators, 4 co-operating teachers and 12 pre-service teachers	Interview survey
Steir and Quarterman (1992)	Physical Educator	USA	To examine the status of PE faculty in historically black colleges and universities and the policies, practices and procedures which relate to them.	51 department chairs	Questionnaire
Graber (1993)	Journal of Teaching in Physical Education	USA	To investigate the social organization of faculty in a high-impact PETE programme. Specifically, to describe how a faculty has developed an organizational framework in which individuals work together toward a shared mission.	10 PETE faculty, 1 chair, 1 former PETE faculty, 6 pre-service teachers	Formal interviews (12 individual, 1 group), informal interviews, observations, document analysis
Graham et al. (1993)	Journal of Teaching in Physical Education	USA	To compare the ability to observe and interpret teaching PE at different stages of expertise.	2 PE teacher educators, 17 pre-service teachers	Participants' observations and descriptions/evaluations of videotaped lessons
Housner et al. (1993a)	Research Quarterly for Exercise and Sport	USA	To assess the external validity of the pedagogical knowledge base described in Housner et al. (1993b). – Is knowledge acquired generalisable or specific to the instructor?	6 PE teacher educators, 28 pre-service teachers	Interviews combined with Pathfinder network scaling algorithm
Housner et al. (1993b)	Research Quarterly for Exercise and Sport	USA	To describe the relationship between prospective students' pedagogical knowledge structures and their performance in a PE methods class.	1 PE teacher educator, 28 pre-service teachers	Interviews combined with Pathfinder network scaling algorithm
Macdonald (1993)	Australian Journal of Education	AUS	To explore the incidence and nature of gendered discourses in the knowledge, beliefs, attitudes, and practices in which male and female faculty and students were immersed in one PETE programme.	18 PETE faculty, 292 pre-service teachers	Observations, formal interviews (individual, paired and group), questionnaires, conversations, document analysis
Williamson (1993)	Research Quarterly for Exercise and Sport	USA	To examine the experiences of five female PE teacher educators in their first positions as assistant professors in research oriented universities.	5 PE teacher educators	Journals, in-depth individual interviews, group discussions
Coffin (1994)	Physical Educator	USA	To capture teachers' and professors' perceptions of the initiation process for school/university collaborations and the resultant effects on the relationship between professionals from the two separate cultures.	9 PE professors, 15 in-service teachers	Semi-structured individual interviews

(continued on next page)

(continued)

Authors	Publication	Country	Aim	Participants	Data sources
Norback and Wattay (1994)	Journal of Teaching in Physical Education	USA	To conduct a job analysis of the knowledge important for newly licenced PE teachers.	184 PE teacher educators, 284 in-service teachers	Questionnaire
Rink et al. (1994)	Journal of Teaching in Physical Education	USA	To compare the knowledge structures for effective teaching of undergraduate pre-service teachers at two universities with different approaches to teacher education course work, and to compare the knowledge structures of teacher educators from the two programmes with each other and with the pre-service students.	5 PE teacher educators, 52 pre-service teachers	Concepts maps about effective teaching completed by participants
Wandzilak et al. (1994)	Journal of Teaching in Physical Education	USA	To demonstrate the effectiveness of the Teaching Feedback Model as an intervention process in assisting PE faculty to make modifications in their own classroom teaching.	7 PE professors	Pre-lesson planning forms, videotaped lessons, students' written responses to lesson content questions
Williamson and Stroot (1994)	Physical Educator	USA	To describe how five beginning PE teacher educators collaborated in a joint research project during their induction into a university setting.	5 PE teacher educators	Weekly journals, in-depth interviews, group discussions
Graber (1995)	Journal of Teaching in Physical Education	USA	To examine (a) how student teachers believed they incorporated general pedagogical knowledge into lessons, (b) how student teachers believed they incorporated pedagogical content knowledge into lessons, and (c) the beliefs held by student teachers regarding those elements of their teacher education programme that most directly guided their practice.	7 PE teacher educators, 20 pre-service teachers, 8 co-operating teachers	Individual long interviews
Macdonald and Tinning (1995)	Journal of Teaching in Physical Education	AUS	To present evidence from a case study of an Australian PETE programme to demonstrate that PETE, when dominated by the kinesiological sciences and craft knowledge, is implicated in the trend to proletarianize PE teaching at the same time that claims for increased teacher professionalism are being made.	18 PETE faculty, 292 pre-service teachers	Observations, formal interviews (individual, paired and group), questionnaires, conversations, document analysis
Carney and Armstrong (1996)	European Physical Education Review	GBR	To examine current provision for PE on undergraduate and post graduate primary Initial Teacher Training (ITT) courses in England and Wales.	Persons responsible for PE in 49 ITT institutions in England and Wales	Questionnaire
Goc Karp et al. (1996)	Journal of Teaching in Physical Education	USA	To explore of the work roles of PE teacher educators by gender and tenure status in research or doctoral-granting institutions.	98 PE teacher educators	Questionnaire
Graber (1996)	Teaching and Teacher Education	USA	To investigate a teacher education programme that has been documented as having a strong influence on the teaching beliefs and subsequent actions of programme graduates.	10 PETE faculty, 1 chair, 1 former PETE faculty, 6 pre-service teachers	Formal interviews (12 individual, 1 group), informal interviews, observations, document analysis
Mitchell (1997)	Journal of Teaching in Physical Education	USA	To determine why and how a sample of PETE scholars manage to be productive publishers.	24 major contributors to JTPE from 1981 through 1989	Questionnaire
Woods et al. (1997)	Physical Educator	USA	To explore PE teacher educators' demographic characteristics, teaching and nonteaching responsibilities, scholarly activities and evaluation for tenure and promotion.	283 PE teacher educators	Questionnaire
Fernández-Balboa (1998)	Teaching Education	USA	Through action research, the author focuses on how his co-learners helped him to delve deeper into his pedagogical deeds and beliefs and to define praxis more clearly as a personal-social process.	1 PE teacher educator and his students	Journals, class notes
Rovegno and Bandhauer (1998)	Journal of Teaching in Physical Education	USA	To examine the research collaboration between an elementary physical educator and a university researcher and to describe what the process meant to each.	1 in-service teacher, 1 university researcher	Participant observation, formal and informal interviews
Savage and Sharpe (1998)	Physical Educator	USA	To provide descriptive information on how graduate teaching assistants (GTAs) in graduate programmes in PE typically acquire their teaching skills and to document the effects of one behavioural practice protocol on the daily teaching practices of one GTA who was experiencing difficulty with her teaching.	191 GTAs (survey), 1 GTA and her students (intervention)	Questionnaires, observations, videotaped lessons

(continued)

Authors	Publication	Country	Aim	Participants	Data sources
Carney and Guthrie (1999)	Physical Education and Sport Pedagogy	GBR	To survey the quantity and quality of PE in Initial Teacher Training (ITT) programmes in Scotland.	5 PE teacher educators	Questionnaire and interviews
Sharpe et al. (1999)	Journal of Teaching in Physical Education	USA	Two matched undergraduate cohorts, one prepared in a professional development school collaborative, were followed over a five-year period to determine the benefits of a collaborative approach to teacher education.	6 PETE faculty, 14 pre-service teachers, 28 co-operating teachers, 7 school administrators	Observations, individual and group interviews, group discussions, written reflections
Yang and Elliott (1999)	Physical Educator	USA	To investigate the issues, concerns, and patterns of female professors in adapted physical education/activity (APE/A).	10 APE/A professors	Questionnaires, individual interviews
Graber and Schempp (2000)	Physical Educator	USA	To examine the biography of a generalist-trained teacher educator and how the course content and learning experiences that were offered in one methods course influenced the developing perspectives of her students.	1 PE teacher educator, 17 pre-service teachers	Observations, formal and informal interviews, document analysis
Johnson (2000)	Physical Educator	USA	To determine the scope, strength, and weakness of gymnastics courses in PE major programmes, as perceived by their instructors.	32 university gymnastics instructors	Questionnaire
Mitchell (2000)	Journal of Teaching in Physical Education	USA	To review the coherence of the PETE programme at Georgia State University.	6 PE teacher educators, 1 chair, 1 dean, 2 co-operating teachers, 1 administrator, 10 current and past students	Collected documents, interviews, videotaped lessons
Cassidy and Tinning (2004)	Teaching Education	AUS	To understand the relationship between messages intended and messages received in PETE.	1 PE teacher educator, 1 pre-service teacher	Observations, interviews ^a
Andriamampianina and Si Moussa (2005)	International Review of Education	CHN & FRA	To examine the roles of PE teacher trainers and the respective curricula in the emergence of particular concepts in PE in France and China.	14 PE teacher educators	Guided interviews, curriculum texts
Dodds (2005)	Journal of Teaching in Physical Education	USA	To examine how PETE women academics report meanings they make of mentoring experiences.	54 PE teacher educators	Paper-and-pencil exercises, CVs, long interviews
Muros Ruiz and Fernández-Balboa (2005)	Journal of Teaching in Physical Education	ESP	To investigate the perspectives of PE teacher educators regarding their conceptualization and practice of critical pedagogy.	17 PE teacher educators	Individual interviews
Patton et al. (2005)	Journal of Teaching in Physical Education	USA	To investigate key aspects of a two-year study of mentoring within a reform-based teacher development project, explore the various mentor relationships, and theorize about key events, tensions, and dynamics.	12 teachers, a research team (research director, assistant, 5 PE teacher educators and 4 doctoral students), mentors (6 PE teacher educators, 3 in-service teachers)	Mentor records, field notes, individual and focus group interviews
Dowling (2006)	Physical Education and Sport Pedagogy	NOR	To illuminate the duality of structure of PE teacher educators' professional identities and of the social construction of gender in PETE.	4 PE teacher educators	In-depth interviews, research log books, policy documents
Bower (2007)	Mentoring & Tutoring: Partnership in Learning	USA	To explore individual reasons for mentoring and organizational factors inhibiting or facilitating mentoring of new faculty.	5 department chairs	In-depth interviews
Gubacs-Collins (2007)	Physical Education and Sport Pedagogy	USA	To introduce the methods, selected findings and a discussion of an action research on implementing a tactical approach to teaching tennis in a pre-service teacher education setting.	1 PE teacher educator, 18 pre-service teachers	Reflections, videotaped lessons, structured interviews
Lund et al. (2007)	Physical Educator	USA	To identify dispositions which PETE faculty consider important for success in the teaching profession, and to determine which of these dispositions were being taught and assessed within their programmes.	47 PETE faculty	Questionnaire
Vickerman (2007)	European Physical Education Review	GBR	To explore the views and experiences of teacher trainers in their role of preparing secondary PE trainees for the inclusion of children with special educational needs.	24 PE teacher educators	Questionnaire, individual semi-structured interviews
Ayers and Housner (2008)	Journal of Teaching in Physical Education	USA	To describe the nature of PETE programmes in the United States.	116 institutions	Questionnaire
Backman (2008)	Sport, Education and Society	SWE	To investigate how the identified values of friluftsliv, expressed in interviews with 17 PE teacher educators in Sweden, reflect struggles for legitimate and privileged knowledge in PETE.	17 PE teacher educators	Semi-structured interviews (15 individual, 1 pair)

(continued on next page)

(continued)

Authors	Publication	Country	Aim	Participants	Data sources
Dowling (2008)	Sport, Education and Society	NOR	To illustrate how teacher educators' viewpoints and understanding of gender relations are inevitably linked to socially constructed webs of emotions, as much as to intellectual rationales.	7 PE teacher educators	In-depth interviews, document analysis
Jorge et al. (2009)	Dental Traumatology	BRA	To investigate the knowledge of undergraduate students and teachers at all PE courses in the city of Belo Horizonte (Brazil) regarding first-aid measures to be taken following tooth avulsion as well as the need for the preventative use of mouth guards.	53 PE teacher educators, 289 pre-service teachers	Questionnaire
Peters and Shuck (2009)	ACHPER Healthy Lifestyles Journal	MYS & AUS	To explore the authors' teaching of TGfU in two culturally diverse settings - one in a Melbourne university setting and one in Malaysia.	2 PE teacher educators	Observations and discussions
Shehu (2009)	Teacher Development	BWA	To examine the contextual issues impinging on the professional development experiences of PE teachers in Botswana, and how the teachers interpret these experiences in relation to their professional identity.	12 PE teacher educators, 35 in-service teachers	Focus groups, semi-structured individual interviews
Parker et al. (2010)	Journal of Teaching in Physical Education	USA	To examine a group of elementary PE teachers from one school district as a community of practice whose objective was to develop and disseminate a district-wide elementary PE curriculum.	3 PE teacher educators, 4 in-service teachers, 1 district co-ordinator	Formal and informal interviews, field notes from observations, artefacts
Piletic and Davis (2010)	ICHPER-SD Journal of Research	USA	To describe the profile, content, delivery mechanism, and application of teaching standards within the Introduction to Adapted Physical Education (APE) course for college/university PETE preparation programmes.	136 faculty members who taught the Introduction to APE course	Questionnaire
Prusak et al. (2010)	Journal of Teaching in Physical Education	USA	To use a case study approach to examine the inner workings and key components of a successful, district-wide PE programme, and the forces that created and sustain it.	1 PE professor, 1 district administrator, 2 school principals, 4 in-service teachers	Interviews, observation notes, field notes, journals
Boyce and Rikard (2011)	Journal of Teaching in Physical Education	USA	To describe US PETE doctoral programmes, faculty, and doctoral graduates.	27 PETE professors	Questionnaire
Chambers and Armour (2011)	Sport, Education and Society	IRL	To report the ways in which PETE students engaged in professional learning during teaching practice in Ireland.	3 university tutors, 5 pre-service teachers, 5 co-operating teachers, 5 school principals	Questionnaires, observations, focus groups, artefacts, journal writing
Deenihan et al. (2011)	European Physical Education Review	IRL	To reports on an opportunity in PETE where pre-service teachers "live the curriculum" and experience a sport education season as participants.	1 PE teacher educator, 1 PE graduate student, 20 pre-service teachers	Observations, written reflections, individual interviews and focus groups
Dowling and Kärhus (2011)	Physical Education and Sport Pedagogy	NOR	To explore the extent to which PETE can be seen to nurture equitable learning environments, within a discourse of teacher professionalism which celebrates diversity, by using the lens of gender equity.	8 PE teacher educators, 12 pre-service teachers, 5 co-operating teachers	Individual in-depth interviews, group interviews, local policy documents
Lee and Curtner-Smith (2011)	Journal of Teaching in Physical Education	USA	To examine the impact of occupational socialization on the perspectives and practices of sport pedagogy doctoral students in terms of PE teaching and PETE.	12 sport pedagogy doctoral students	Formal and informal interviews, observations, self-reflective posters
Legge (2011)	Asia-Pacific Journal of Health, Sport and Physical Education	NZL	To reflect on a 'snapshot story' drawn from the author's autoethnographic research about teaching te ao kori to PETE students.	1 PE teacher educator	Autoethnographic composite 'snapshot' story
Iisahunter (2011)	Teaching & Teacher Education	AUS	To illustrate one teacher educator's attempt to embody praxis as a form of academic work, emphasizing the importance of the corporeal in learning and teaching.	1 PE teacher educator	The author's embodied self, student questionnaire, assessment items
Makopoulou and Armour (2011)	Physical Education and Sport Pedagogy	GRC	To offer an in-depth insight into the nature and quality of existing PE-CPD provision in Greece from the perspective of PE teachers and CPD stakeholders.	6 CPD stakeholders (3 PE teacher educators), 67 in-service teachers	Questionnaire, individual in-depth semi-structured interviews
Melnychuk et al. (2011)	Canadian Journal of Education	CAN	To identify PE teacher educators and examine PETE programmes presently offered at undergraduate degree-granting Canadian universities.	36 PE teacher educators	Questionnaire
Parker et al. (2011)	Journal of Teaching in Physical Education	USA	To initiate a discussion and explore reactions to PETE doctoral education in the US based on the findings reported by Ward et al. (2011).	27 PETE faculty	Semi-structured focus group and phone interviews

(continued)

Authors	Publication	Country	Aim	Participants	Data sources
Pearson (2011)	Educational Action Research	GBR	To explore how the author has come to theorise her work as a critical emancipatory practice as a lecturer in primary PE.	1 PE teacher educator, 94 pre-service teachers	Questionnaires, informal discussions, diary entries
Ward et al. (2011)	Journal of Teaching in Physical Education	USA	To report on the content studied in the core curriculum of doctoral programmes, admission requirements, number of full and part time students, number of faculty serving these students, funding supporting students, and type and scope of research classes.	24 PETE faculty	Publically accessible descriptive and demographic data, individual interviews, programme documents
Webb and Scouler (2011)	Educational Action Research	GBR	To reflect on the reflections of pupils about being "reflective learners", one of the Personal, Learning and Thinking Skills of the secondary National Curriculum for England.	1 PE teacher educator, 1 in-service teacher, 20 school pupils	Emails and audio recordings of reflection discussions, pupil reflection worksheets
Casey and Fletcher (2012)	Journal of Teaching in Physical Education	GBR & CAN	To explore the authors' transition from high school teaching to university-based PETE.	2 PE teacher educators	Reflective diaries, journal entries
Fletcher and Bullock (2012)	Studying Teacher Education	CAN	To examine the pedagogical approaches of the authors for engaging teacher candidates in thinking about physical literacy and scientific literacy, respectively.	1 PE teacher educator, 1 science teacher educator	Collaborative blog, bi-weekly recorded meetings
Garbett and Ovens (2012)	Australian Journal of Teacher Education	NZL	To document the learning of two teacher educators about teacher education as they attended to students' concerns during peer-teaching in their respective science education and PETE courses.	1 PE teacher educator, 1 science teacher educator	Formal and informal discussions, journals, observations, feedback from and interviews with students.
Hetland and Strand (2012)	Physical Educator	USA	To develop a status report of PETE faculty in the US Central District.	118 PETE faculty	Questionnaire
Hill et al. (2012)	Physical Educator	USA	To elicit the opinions of PE teachers and teacher educators regarding the appropriateness of co-educational learning environments.	152 PE teacher educators, 265 in-service teachers	Questionnaires
Lavay et al. (2012)	Physical Education and Sport Pedagogy	USA	To describe the instructional behaviour management practices and content taught in college/university PETE programmes in the US, and to provide recommendations for enhancing behaviour management education and training for pre-service physical educators.	134 PE teacher educators	Questionnaire
Ní Chróinín et al. (2012)	Teaching and Teacher Education	IRL	To explore teacher educators' perspectives on beginning teacher standards for PETE in Ireland.	13 PE teacher educators	Semi-structured individual interviews
Patton et al. (2012)	Research Quarterly for Exercise and Sport	USA	To examine facilitators' collective knowledge and experience with ongoing PE professional development (PD), specifically regarding conceptions of their role in the process.	12 PD facilitators (all PE teacher educators)	Semi-structured interviews, informal conversational interviews, CVs
Perlman et al. (2012)	Australian Journal of Teacher Education	AUS	To examine movement-based sport games and the potential learning opportunities (i.e. game performance elements) for physical education students.	5 PE teacher educators	Semi-structured individual and focus group interviews, observations
Smith (2012)	Physical Education and Sport Pedagogy	NZL	To determine how the proposed merging of the health and physical education (HPE) teacher education practices within a university department of sport and exercise science impacted on the teacher educators and then why they fought to retain their place in the Faculty of Education.	5 HPE teacher educators, 1 dean, 1 associate dean, 1 director of teacher education	Interviews, observations, document analysis
Bruce (2013)	Sport, Education and Society	NZL	To describe the epistemological and ontological shifting process the author experienced through participation in a self-study research project.	1 PE teacher educator	Journeying with a mentor and with a team of participant researchers, journal writing, taped interviews between the author and her mentor and writing for academic publication

(continued on next page)

(continued)

Authors	Publication	Country	Aim	Participants	Data sources
Cazers and Curtner-Smith (2013)	Research Quarterly for Exercise and Sport	USA	To reconstruct the historical and legendary contribution of one exemplary African American PE teacher educator who lived and worked in the Deep South prior to and immediately following the 1954 Brown v. Board of Education court case.	1 PE teacher educator, 1 retired staff member, 1 retired president, 1 current staff member and 3 current faculty	In-depth semi-structured interviews, informal conversations and emails, online university documents
Cutforth (2013)	Quest	USA	To reflect on the motivations, influences, and experiences that have informed the author's intentional efforts to integrate teaching, research, and service into his professional identity as a community-engaged scholar.	1 community engaged scholar	Recollection, written reflections, published and unpublished writings
Lorente and Kirk (2013)	Sport, Education and Society	ESP	To reveal some lessons learnt through action research by a teacher educator as she sought to apply alternative, democratic assessment practices in a PETE programme.	1 PE teacher educator, 40 pre-service teachers	Field notes, student portfolios, unit meta-assessment conclusions
McMahon and Huntly (2013)	Australian Journal of Teacher Education	AUS	To report on narrative research that focuses on two tertiary HPE educators' bodies. In particular, it explores how their lived encounters impacted upon their everyday teaching practice.	2 HPE teacher educators	Narrative representations of embodied experiences
Ní Chróinín, Mitchell, et al. (2013)	Irish Educational Studies	IRL	To examine pre-service primary teachers' perspectives on teaching and learning experiences within college-based courses in 'practical' subject areas within a teacher education programme.	3 teacher educators (1 PE teacher educator), 11 pre-service teachers	Focus groups, observations, written reflections, lecture planning documents
Ní Chróinín, O'Sullivan, et al. (2013)	European Journal of Teacher Education	IRL	To explore teacher educators' perspectives on how beginning teacher standards for PETE could be implemented and to consider the possible impact on the profession within the discourses of power.	13 PE teacher educators	Semi-structured individual interviews
Cole and Smith (2014)	Palaestra	USA	To investigate the personal truth of a professor of sport pedagogy with a physical impairment, to examine whether she experienced marginalization in the dimension of ableness within the historical context of her time.	1 PE teacher educator	Semi-structured in-depth interviews
Fletcher and Casey (2014)	Journal of Teaching in Physical Education	CAN & GBR	To examine the authors' experiences as beginning teacher educators who taught using models-based practice, and to consider the benefits of using collaborative self-study to foster deep understandings of teacher education practice.	2 PE teacher educators	Reflective diaries, field notes
Legge (2014)	Australian Journal of Teacher Education	NZL	To discuss how the author framed and wrote an autoethnographic personal narrative of her lived experience as a New Zealand PE teacher educator in the presence of two cultures, Māori and Pakehā.	1 PE teacher educator	'Snapshot stories' derived from field experiences
Legge and Smith (2014)	Australian Journal of Teacher Education	NZL	To use visual ethnography to critique the authors' teaching over twenty years of annual five-day bush-based residential camps.	2 PE teacher educators	Photographs representing experiences and practices
Mordal-Moen and Green (2014)	Sport, Education and Society	NOR	To examine the place of reflexivity in the philosophies and practices of PE teacher educators in Norway.	15 PE teacher educators	Semi-structured individual interviews
Patton and Parker (2014)	Physical Education and Sport Pedagogy	USA	To examine what constitutes successful professional development (PD) from the perspective of an international group of PD facilitators.	13 PD facilitators (12 PE teacher educators)	Semi-structured interviews, informal conversational interviews, CVs
Pennington et al. (2014)	Journal of Teaching in Physical Education	USA	To understand the history, from conception to institutionalization, of the systemic success in PE that seems to have been achieved in a particular school district.	Interviews: 2 district co-ordinators, 1 district superintendent, 2 PE teacher educators, 2 principals, 4 teachers. Observations: 30 teachers	Individual in-depth and follow-up interviews, observations, field notes
Petrie et al. (2014)	Australian Journal of Teacher Education	NZL	To explore the pathway that supported both academics and teachers to re-imagine HPE in two primary schools in Aotearoa-New Zealand.	3 PE teacher educators, 4 in-service teachers	Interviews, journals, team meeting transcripts and emails, various school and project documents
Silverman et al. (2014)	Journal of Teaching in Physical Education	USA	To examine PE pedagogy faculty members' perceptions of journal quality.	273 PE teacher educators	Questionnaire

Note: As far as possible, descriptions of aims and data sources are as stated in the original articles.

^a Data sources for PE teacher educator data were not explained in this article but were available in the cited thesis of Cassidy.

References

- Anderson, S., Allen, P., Peckham, S., & Goodwin, N. (2008). Asking the right questions: scoping studies in the commissioning of research on the organisation and delivery of health services. *Health Research Policy and Systems*, 6(7).
- Andriampianina, P., & Si Moussa, A. (2005). The training of physical education teachers in France and China: a comparative analysis of curricula and attitudes. *International Review of Education*, 51, 23–34.
- Arskey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32.
- Ayers, S. F., & Housner, L. D. (2008). A descriptive analysis of undergraduate PETE programs. *Journal of Teaching in Physical Education*, 27, 51–67.
- Backman, E. (2008). What is valued in friluftsliv within PE teacher education? Swedish PE teacher educators' thoughts about friluftsliv analysed through the perspective of Pierre Bourdieu Sport. *Education and Society*, 13(1), 61–76.
- Barnett-Page, E., & Thomas, J. (2009). Methods for the synthesis of qualitative research: a critical review. *BMC Medical Research Methodology*, 9(59), 1–11.
- Booth, A., Papaioannou, D., & Sutton, A. (2012). *Systematic approaches to a successful literature review*. London: Sage.
- Boroviak, P. C. (1990). An examination of policies and procedures used in the administration of physical education graduate assistantship programs. *Physical Educator*, 47(4), 204–208.
- Bower, G. G. (2007). Factors influencing the willingness to mentor 1st-year faculty in physical education departments. *Mentoring & Tutoring: Partnership in Learning*, 15(1), 73–85.
- Boyce, B. A., & Rikard, G. L. (2011). Characteristics of PETE doctoral level institutions: descriptions of programs, faculty and doctoral students. *Journal of Teaching in Physical Education*, 30, 103–115.
- Bruce, J. (2013). Dancing on the edge: a self-study exploring postcritical possibilities in physical education. *Sport, Education and Society*, 18(6), 807–824.
- Burden, J. W., Jr., Harrison, L., Jr., & Hodge, S. R. (2005). Perceptions of African American faculty in kinesiology-based programs at predominantly white American institutions of higher education. *Research Quarterly for Exercise and Sport*, 76(2), 224–237.
- Carney, C., & Armstrong, N. (1996). The provision of physical education in primary initial teacher training courses in England and Wales. *European Physical Education Review*, 2(1), 64–74.
- Carney, C., & Guthrie, J. (1999). Provision of physical education in primary education initial teacher training courses in Scotland. *European Journal of Physical Education*, 4(2), 124–135.
- Casey, A., & Fletcher, T. (2012). Trading places: from physical education teachers to teacher educators. *Journal of Teaching in Physical Education*, 31, 362–380.
- Cassidy, T., & Tinning, R. (2004). Slippage is not a dirty word: considering the usefulness of Giddens' notion of knowledgeability in understanding the possibilities for teacher education. *Teaching Education*, 15(2), 175–188.
- Cazars, G., & Curtner-Smith, M. (2013). Legacy of a pioneer African American educator. *Research Quarterly for Exercise and Sport*, 84(1), 39–51.
- Chambers, F., & Armour, K. (2011). Do as we do and not as we say: teacher educators supporting student teachers to learn on teaching practice. *Sport, Education and Society*, 16(4), 527–544.
- Cochran-Smith, M., & Zeichner, K. M. (2005). *Studying teacher education: The report of the AERA panel on research and teacher education*. Washington DC: AERA.
- Coffin, D. G. (1994). Multiple realities can enhance school/university collaboration. *Physical Educator*, 52(2).
- Cole, M., & Smith, R. (2014). Life history of Karen. A physical education educator with an impairment. *Palaestra*, 28(2), 47–53.
- Colquhoun, H. L., Levac, D., O'Brien, K. K., Straus, S., Tricco, A. C., Perrier, L., et al. (2014). Scoping reviews: time for clarity in definition, methods, and reporting. *Journal of Clinical Epidemiology*, 67, 1291–1294.
- Cruse, D., Evans, M., Overby, L. Y., & Wilkens, E. D. (1991). Perspectives on physical education in traditionally black institutions. *Journal of Physical Education, Recreation & Dance*, 62(7), 28.
- Cutforth, N. (2013). The journey of a community-engaged scholar: an autoethnography. *Quest*, 65(1), 14–30.
- Deenihan, J. T., MacPhail, A., & Young, A. (2011). 'Living the curriculum': Integrating sport education into a physical education teacher education programme. *European Physical Education Review*, 17(1), 51–68.
- Dodds, P. (2005). Chapter 4: PETE women's experiences of being mentored into postsecondary faculty positions. *Journal of Teaching in Physical Education*, 24, 344–367.
- Douglas, D. D., & Halas, J. M. (2013). The wages of whiteness: confronting the nature of ivory tower racism and the implications for physical education. *Sport, Education and Society*, 18(4), 453–474.
- Dowling, F. (2006). Physical education teacher educators' professional identities, continuing professional development and the issue of gender equality. *Physical Education and Sport Pedagogy*, 11(3), 247–263.
- Dowling, F. (2008). Getting in touch with our feelings: the emotional geographies of gender relations in PETE. *Sport, Education and Society*, 13(3), 247–266.
- Dowling, F., & Kärhus, S. (2011). An analysis of the ideological work of the discourses of 'fair play' and moral education in perpetuating inequitable gender practices in PETE. *Physical Education and Sport Pedagogy*, 16(2), 197–211.
- Elliott-Johns, S. E., & Tidwell, D. L. (2013). Different voices, many journeys: explorations of the transformative nature of the self-study of teacher education practices. *Studying Teacher Education: A Journal of self-study of teacher education practices*, 9(2), 91–95.
- Erickson, L. B., Young, J. R., & Pinneger, S. (2011). Teacher educator identity: emerging understandings of person, positioning, roles, and collaborations. *Studying Teacher Education: A Journal of self-study of teacher education practices*, 7(2), 105–107.
- European Commission. (2013). *Supporting teacher educators for better learning outcomes*. Strasbourg: Author.
- Fernández-Balboa, J.-M. (1995). Reclaiming physical education in higher education through critical pedagogy. *Quest*, 47, 91–114.
- Fernández-Balboa, J.-M. (1998). The practice of critical pedagogy: critical self-reflection as praxis. *Teaching Education*, 9(2), 47–53.
- Fletcher, T., & Bullock, S. M. (2012). Enacting literacy pedagogies: a collaborative self-study by teacher educators in physical education and science. *Studying Teacher Education*, 8(1), 19–33.
- Fletcher, T., & Casey, A. (2014). The challenges of models-based practice in physical education teacher education: a collaborative self-study. *Journal of Teaching in Physical Education*, 33, 403–421.
- Garbett, D., & Ovens, A. (2012). Being a teacher educator: exploring issues of authenticity and safety through self-study. *Australian Journal of Teacher Education*, 37(3), 44–56.
- Goc Karp, G., & Peterson, D. (1991). Physical education professors' use of questioning. *Physical Educator*, 48(1).
- Goc Karp, G., Williamson, K., & Shifflett, B. (1996). Physical education teacher educators' work roles in research and doctoral-granting institutions. *Journal of Teaching in Physical Education*, 15, 251–265.
- Graber, K. C. (1990). What they see and what they do: perceptions and expectations held by teacher educators. *Journal of Teaching in Physical Education*, 10, 49–65.
- Graber, K. C. (1993). The emergence of faculty consensus concerning teacher education: the socialization process of creating and sustaining faculty agreement. *Journal of Teaching in Physical Education*, 12, 424–436.
- Graber, K. C. (1995). The influence of teacher education programs on the beliefs of student teachers: general pedagogical knowledge, pedagogical content knowledge, and teacher education course work. *Journal of Teaching in Physical Education*, 14, 157–178.
- Graber, K. C. (1996). Influencing student beliefs: the design of a "high impact" teacher education program. *Teaching and Teacher Education*, 12(5), 451–466.
- Graber, K. C., & Schempp, P. G. (2000). The influence of a generalist-taught methods course. *Journal of Teaching in Physical Education*, 57(4).
- Graham, K. C., French, K. E., & Woods, A. M. (1993). Observing and interpreting teaching-learning processes: Novice PETE students, experienced PETE students, and expert teacher educators. *Journal of Teaching in Physical Education*, 13, 46–61.
- Gubacs-Collins, K. (2007). Implementing a tactical approach through action research. *Physical Education and Sport Pedagogy*, 12(2), 105–126.
- Hetland, K., & Strand, B. (2012). A status report of PETE faculty in the central district. *Physical Educator*, 69, 36–51.
- Hill, G. M., Hannon, J. C., & Knowles, C. (2012). Physical education teachers' and university teacher educators' perceptions regarding coeducational vs. single gender physical education. *Physical Educator*, 69, 265–288.
- Housner, L. D., Gomez, R., & Griffey, D. C. (1993a). A pathfinder analysis of pedagogical knowledge structures: a follow-up investigation. *Research Quarterly for Exercise and Sport*, 64(3), 291–299.
- Housner, L. D., Gomez, R., & Griffey, D. C. (1993b). Pedagogical knowledge structures in prospective teachers: relationships to performance in a teaching methodology course. *Research Quarterly for Exercise and Sport*, 64(2), 167–177.
- Johnson, M. (2000). The status of gymnastics in selected physical education major programs. *Physical Educator*, 57(1).
- Jorge, K. O., Ramos-Jorge, M. L., Fonseca de Toledo, F., Caldeira Alves, L., Martins Paiva, S., & Zarzar, P. M. (2009). Knowledge of teachers and students in physical education's faculties regarding first-aid measures for tooth avulsion and replantation. *Dental Traumatology*, 25, 494–499.
- Kärhus, S. (2012). Providers, consumers and the horizons of the possible: a case study of marketization and physical education teacher education pedagogical discourse. *Sport, Education and Society*, 17(2), 245–259.
- Kirk, D. (2014). Making a career in PESP in the corporatized university: reflections on hegemony, resistance, collegiality and scholarship. *Sport, Education and Society*, 19(3), 320–332.
- Korthagen, F., Loughran, J., & Lunenberg, M. (2005). Teaching teachers – studies into the expertise of teacher educators: an introduction to this theme issue. *Teaching and Teacher Education*, 21(2), 107–115.
- Kovar, S. K. (2004). The thirty-eighth Amy Morris Homans commemorative lecture 2004: a sense of connection and direction. *Quest*, 56(3), 267–284.
- Lavay, B., Henderson, H., French, R., & Guthrie, S. (2012). Behavior management instructional practices and content of college/university physical education teacher education (PETE) programs. *Physical Education and Sport Pedagogy*, 17(2), 195–210.
- Lawson, H. A. (1983a). Toward a model of teacher socialization in physical education: the subjective warrant, recruitment, and teacher education (part 1). *Journal of Teaching in Physical Education*, 2, 3–16.
- Lawson, H. A. (1983b). Toward a model of teacher socialization in physical education: entry into schools, teachers' role orientations, and longevity in teaching (part 2). *Journal of Teaching in Physical Education*, 3, 3–15.
- Lawson, H. A. (1991). Future research on physical education teacher education professors. *Journal of Teaching in Physical Education*, 10, 229–248.
- Lee, H.-M., & Curtner-Smith, M. D. (2011). Impact of occupational socialization on

- the perspectives and practices of sport pedagogy doctoral students. *Journal of Teaching in Physical Education*, 30, 296–313.
- Legge, M. (2011). Te ao kori as expressive movement in Aotearoa New Zealand physical education teacher education (PETE): a narrative account. *Asia-Pacific Journal of Health, Sport and Physical Education*, 2(3/4), 81–95.
- Legge, M. F. (2014). Autoethnography and teacher education: snapshot stories of cultural encounter. *Australian Journal of Teacher Education*, 39(5), 117–134.
- Legge, M. F., & Smith, W. (2014). Teacher education and experiential learning: a visual ethnography. *Australian Journal of Teacher Education*, 39(12), 95–110.
- Levac, D., Colquhoun, H., & O'Brien, K. (2010). Scoping studies: advancing the methodology. *Implementation Science*, 5, 69.
- lisahunter. (2011). Re-embodiment (preservice middle years) teachers? An attempt to reposition the body and its presence in teaching and learning. *Teaching and Teacher Education*, 27, 187–200.
- Livingston, K. (2014). Teacher educators: hidden professionals? *European Journal of Education*, 49(2), 218–232.
- Lorente, E., & Kirk, D. (2013). Alternative democratic assessment in PETE: an action-research study exploring risks, challenges and solutions. *Sport, Education and Society*, 18(1), 77–96.
- Loughran, J. J., Hamilton, M. L., LaBoskey, V. K., & Russell, T. L. (Eds.). (2004). *International handbook of self-study of teaching and teacher education practices*. Dordrecht: Kluwer Academic Publishers.
- Lund, J., Wayda, V., Woodard, R., & Buck, M. (2007). Professional dispositions: what are we teaching prospective physical education teachers? *Physical Educator*, 64(1), 38.
- Macdonald, D. (1993). Knowledge, gender and power in physical education teacher education. *Australian Journal of Education*, 37(3), 259–278.
- Macdonald, D., & Tinning, R. (1995). Physical education teacher education and the trend to proletarianization: a case study. *Journal of Teaching in Physical Education*, 15, 98–118.
- MacPhail, A. (2011). Professional learning as a physical education teacher educator. *Physical Education and Sport Pedagogy*, 16(4), 435–451.
- Makopoulou, K., & Armour, K. (2011). Teachers' professional learning in a European learning society: the case of physical education. *Physical Education and Sport Pedagogy*, 16(4), 417–433.
- McMahon, J. A., & Huntly, H. E. (2013). The lived and living bodies of two health and physical education tertiary educators: how embodied consciousness highlighted the importance of their bodies in their teaching practice in HPE. *Australian Journal of Teacher Education*, 38(4), 31–49.
- Melnychuk, N., Robinson, D. B., Lu, C., Chorney, D., & Randall, L. (2011). Physical education teacher education (PETE) in Canada. *Canadian Journal of Education*, 34(2), 148–168.
- Metzler, M. W., & Freedman, M. S. (1985). Here's looking at you PETE: a profile of physical education teacher education faculty. *Journal of Teaching in Physical Education*, 4, 123–133.
- Mitchell, M. F. (1992a). A descriptive analysis and academic genealogy of major contributors to JTPE in the 1980s. *Journal of Teaching in Physical Education*, 11, 426–442.
- Mitchell, M. F. (1992b). Scholarly behaviors of physical education methods teacher educators in Ohio. *Journal of Teaching in Physical Education*, 11, 303–314.
- Mitchell, M. F. (1997). Productive physical education pedagogy scholars: why they do it and how. *Journal of Teaching in Physical Education*, 16, 278–299.
- Mitchell, M. F. (2000). Chapter 9: an approach to programme assessment: locating indicators of a coherent programme. *Journal of Teaching in Physical Education*, 19, 522–537.
- Mitchell, M. F., & Lawson, H. A. (1986). Career paths and role orientations of professors of teacher education in physical education. In M. Pieron, & G. Graham (Eds.), *Sport pedagogy* (pp. 41–46). Champaign, IL: Human Kinetics.
- Mordal-Moen, M., & Green, K. (2014). Neither shaking nor stirring: a case study of reflexivity in Norwegian physical education teacher education. *Sport, Education and Society*, 19(4), 415–434.
- Muros Ruiz, B., & Fernández-Balboa, J.-M. (2005). Physical education teacher educators' personal perspectives regarding their practice of critical pedagogy. *Journal of Teaching in Physical Education*, 24, 243–264.
- Murray, J., & Harrison, J. (2008). Editorial. *European Journal of Teacher Education*, 31(2), 109–115.
- Ní Chróinín, D., Mitchell, E., Kenny, A., Murtagh, E., & Vaughan, E. (2013). How can pre-service primary teachers' perspectives contribute to a pedagogy that problematises the 'practical' in teacher education? *Irish Education Studies*, 32(2), 251–267.
- Ní Chróinín, D., O'Sullivan, M., & Tormey, R. (2013). Teacher educators' perspectives on the implementation of beginning teacher standards for physical education in Ireland: developing and regulating the profession? *European Journal of Teacher Education*, 36(3), 261–278.
- Ní Chróinín, D., Tormey, R., & O'Sullivan, M. (2012). Beginning teacher standards for physical education: promoting a democratic ideal? *Teaching and Teacher Education*, 28, 78–88.
- Norback, J. S., & Wattay, D. (1994). Job analysis of the knowledge important for newly licensed physical education teachers. *Journal of Teaching in Physical Education*, 14, 60–84.
- Parker, M., Patton, K., Madden, M., & Sinclair, C. (2010). From committee to community: the development and maintenance of a community of practice. *Journal of Teaching in Physical Education*, 29, 337–357.
- Parker, M., Sutherland, S., Sinclair, C., & Ward, P. (2011). Not surprised, but concerned: the professoriate's reaction to PETE doctoral education in the United States. *Journal of Teaching in Physical Education*, 30, 157–177.
- Patton, K., Pagnano, K., Griffin, L. L., Dodds, P., Sheehy, D., Arnold, R., et al. (2005). Chapter 2: navigating the mentoring process in a research-based teacher development project: a situated learning perspective. *Journal of Teaching in Physical Education*, 24, 302–325.
- Patton, K., & Parker, M. (2014). Moving from 'things to do on Monday' to student learning: physical education professional development facilitators' views of success. *Physical Education and Sport Pedagogy*, 19(1), 60–75.
- Patton, K., Parker, M., & Neutzling, M. M. (2012). Tennis shoes required: the role of the facilitator in professional development. *Research Quarterly for Exercise and Sport*, 83(4), 522–532.
- Pearson, J. (2011). Adapting the boundaries in primary physical education: an account of my learning, my educational influence and improved practice. *Educational Action Research*, 19(4), 503–515.
- Pennington, T. R., Prusak, K. A., & Wilkinson, C. (2014). *Succeed together or fail alone: Going from good to great in physical education*.
- Perlman, D., Forrest, G., & Pearson, P. (2012). Nintendo Wii: opportunities to put the education back into physical education. *Australian Journal of Teacher Education*, 37(7), 85–94.
- Peters, J., & Shuck, L. (2009). Breaking down the barriers: Insights into using a student centred games approach in Australian and Malaysian pre-service settings. *ACHPER Healthy Lifestyles Journal*, 56(3/4), 29–35.
- Petrie, K., Burrows, L., & Cosgriff, M. (2014). Building a community of collaborative inquiry: a pathway to re-imagining practice in health and physical education. *Australian Journal of Teacher Education*, 39(2), 45–57.
- Piletic, C. K., & Davis, R. (2010). A profile of the introduction to adapted physical education course within undergraduate physical education teacher education programs. *ICHPER-SD Journal of Research*, 5(2), 26–32.
- Prusak, K. A., Pennington, T., Vincent Graser, S., Beighle, A., & Morgan, C. F. (2010). Systemic success in physical education: the East Valley phenomenon. *Journal of Teaching in Physical Education*, 29, 85–106.
- Rink, J. E., French, K., Lee, A. M., Solmon, M. A., & Lynn, S. K. (1994). A comparison of pedagogical knowledge structures of preservice students and teacher educators in two institutions. *Journal of Teaching in Physical Education*, 13, 140–162.
- Rovegno, I., & Bandhauer, D. (1998). A study of the collaborative research project: shared privilege and shared empowerment. *Journal of Teaching in Physical Education*, 17, 357–375.
- Savage, M. P., & Sharpe, T. (1998). Demonstrating the need for formal graduate student training in effective teaching practices. *Physical Educator*, 55(3).
- Sharpe, T. (1992). Teacher preparation – a professional development school approach. *Journal of Physical Education, Recreation & Dance*, 63(5), 82–87.
- Sharpe, T., Lounsbury, M. F., Golden, C., & Deibler, C. (1999). Analysis of an ongoing, district-wide collaborative approach to teacher education. *Journal of Teaching in Physical Education*, 19, 79–96.
- Shehu, J. (2009). Professional development experiences of physical education teachers in Botswana: epistemological implications. *Teacher Development: An International Journal of Teachers' Professional Development*, 13(3), 267–283.
- Sicilia Camacho, A., & Fernández-Balboa, J.-M. (2006). Ethics, politics and bio-pedagogy in physical education teacher education: easing the tension between the self and the group. *Sport, Education and Society*, 11(1), 1–20.
- Siedentop, D. (2002). Lessons learned. *Journal of Teaching in Physical Education*, 21, 454–464.
- Silverman, S., Hodges Kulinna, P., & Philips, S. R. (2014). Physical education pedagogy faculty perceptions of journal quality. *Journal of Teaching in Physical Education*, 33, 134–154.
- Smith, W. (2012). Changing the logic of practice: (re)drawing boundaries, (re) defining fields. *Physical Education and Sport Pedagogy*, 17(3), 251–262.
- Sparks, B., & Steffen, J. (1990). An analysis of the clinical experience in teacher education in physical education within institutions of varying sizes, orientation, and missions. *Physical Educator*, 47(1).
- Steir, W. F., Jr., & Quarterman, J. (1992). Characteristics of physical education faculty in Historically Black Colleges and Universities (HBCUs). *Physical Educator*, 49(2), 73–80.
- Swennen, A., & Bates, T. (2010). The professional development of teacher educators. *Professional Development in Education*, 36(1/2), 1–7.
- Tannehill, D. (2005). Back to the future: we listened and we learned. *Quest*, 57, 287–299.
- Vickerman, P. (2007). Training physical education teachers to include children with special educational needs: perspectives from physical education initial teacher training providers. *European Physical Education Review*, 13(3), 385–402.
- Wandzilak, T., Bonnsetter, R. J., & Mortensen, L. L. (1994). Examining congruence among teaching objectives, classroom behavior, and student learning: feedback for university professors. *Journal of Teaching in Physical Education*, 13, 260–273.
- Ward, P., Parker, M., Sutherland, S., & Sinclair, C. (2011). A critical examination of the curriculum of physical education teacher education doctoral programs. *Journal of Teaching in Physical Education*, 30, 145–156.
- Webb, L. A., & Scouler, T. (2011). Reflection on reflection on reflection: collaboration in action research. *Educational Action Research*, 19(4), 469–487.
- Weiler, K. (2007). The case of Martha Deane: Sexuality and power at cold war UCLA. *History of Education Quarterly*, 47(4), 470–496.
- Williamson, K. M. (1990a). Conflicting demands for physical education teacher educators: institutional rewards versus role expectations. *Physical Educator*, 47(1).
- Williamson, K. M. (1990b). The ivory tower: myth or reality? *Journal of Teaching in Physical Education*, 9, 95–105.
- Williamson, K. M. (1993). A qualitative study on the socialisation of beginning

- physical education teacher educators. *Research Quarterly for Exercise and Sport*, 64(2), 188–201.
- Williamson, K. M., & Stroot, S. A. (1994). Benefits, limitations, and implications of collaborative research among beginning physical education teacher educators. *Physical Educator*, 51(4), 170–178.
- Woods, M. L., Philips, D. A., & Carlisle, C. (1997). Characteristics of physical education teacher educators. *Physical Educator*, 54(3), 150–159.
- Yang, J. J., & Elliott, G. (1999). Socialization and leadership in adapted physical education/activity: perspectives of female faculty. *Physical Educator*, 56(2).
- Zeichner, K. M. (2007). Accumulating knowledge across self-studies in teacher education. *Journal of Teacher Education*, 58, 36–47.

II

PHYSICAL EDUCATION TEACHER EDUCATORS' VIEWS REGARDING THE PURPOSE(S) OF SCHOOL PHYSICAL EDUCATION

by

McEvoy, E. Heikinaro-Johansson, P., & MacPhail, A. (2017)

Sport Education and Society, 22(7), 812–824

Reproduced with kind permission by Taylor & Francis.

McEvoy, E. Heikinaro-Johansson, P., & MacPhail, A. (2017). Physical education teacher educators' views regarding the purpose(s) of school physical education. *Sport Education and Society*, 22(7), 812-824. DOI: 10.1080/13573322.2015.1075971

Final Accepted Version

Abstract

The aim of this paper was to gain an understanding of the views of a group of physical education teacher educators on the purpose(s) of school physical education and whether, how and why these views have changed over time. Semi-structured individual interviews were carried out with thirteen physical education teacher educators; a fourteenth participant responded to interview questions in writing. Participants were based in seven countries: Belgium, Finland, Germany, Ireland, New Zealand, Switzerland and the USA. A relative consensus on the overarching purpose of physical education was evident, centred on physical education preparing young people for a lifetime of physical activity. The framing of this shared purpose differed somewhat between participants, reflecting a range of perspectives on the value of physical activity. Delineating the boundaries of their subject, participants characterised obesity prevention and maximising in-class physical activity as potential by-products rather than as goals of the subject. The views of many had changed over time, influenced by such factors as findings from research, societal expectations and a perceived need to legitimise physical education within school and university contexts. We note that many of the influences acting on the views of the physical education teacher educators are also known to affect practicing teachers. This suggests a possibility, in the open reflection of physical education teacher educators on the interaction between their views and the institutional and societal contexts within which they work, to provide future teachers with alternative value pathways paved with relatable explanations and shared experiences.

Keywords: Physical education teacher educators, physical education, purpose, physical activity, value orientations

The project of which this study forms a part focuses on the professional journeys, views, experiences and practices of an international group of physical education teacher educators. This paper represents a starting point for the sharing of this research, centring on the views these physical education teacher educators hold regarding the purpose(s) of their subject, how these views have changed over time and the influences acting on these views. Discussing values and purpose in teacher education, Hansen (2008, p. 23) argues that without dialogue on purpose people can become passive and resigned to the status quo and that enquiry into purpose functions to keep the conversation ‘vibrant, dynamic and consequential’, adding that such dialogue is ‘indispensable to the very existence of a sense of purpose’. Physical education teacher educators are acknowledged to play key roles in the transformation and reproduction of physical education work practices and knowledge (Lawson, 1991; Kirk & Macdonald, 2001). In this light, the ends towards which the work of these professionals are directed and the circuits of persuasion within which the goals to which they aspire are formed, influenced, or resist influence, become of import for anyone interested in the practice and outcomes of physical education.

Purpose(s) of physical education

According to Kirk (2010, p. 1), ‘physical education is defined by what is said, done and written in its name’. Looking at what has been written in the name of physical education, we find in the various historical and philosophical accounts outlining the journey the subject has taken in its modern history (e.g. Kirk, 2010; McNamee, 2005; Morgan, 2006) a conception of physical education as socially constructed with an ever-changing purpose and content. As O’Sullivan (2004, p. 394) reminds us, over time the profession ‘has been assigned, accepted, ignored, and rejected various goals for physical education’. These goals have typically centred on achieving educational and health outcomes, although the efficacy of the subject in achieving such goals has been questioned (Bailey et al., 2009; Trost, 2006).

Taking a global look at the goals to which physical education currently aspires, Hardman (2011) lists physical education curricular aims around the world, in order of prevalence, as: (1) development of motor and sport-specific skills, (2) promotion of health-related fitness and active lifestyles, and (3) personal, social and moral development. Focusing on the seven countries in which our study participants are based we see these themes echoed. The formally stated purpose of physical education in Finland is to prepare children and youth for a lifetime of physical activity. In achieving this purpose, equal importance is afforded to the development of psychomotor, cognitive, affective and behavioural skills (Heikinaro-Johansson, Palomäki, & McEvoy, 2014). Similarly, according to the website of Shape America, the largest representative body for physical education in the United States, the overarching goal of the subject is to ‘develop physically literate individuals who have the knowledge, skills and confidence to enjoy a lifetime of healthful physical activity’ (SHAPE America, 2014), while in Ireland the aim of the subject is ‘to support learners’ confident, enjoyable and informed participation in physical activity now and in the future’ (National Council for Curriculum and Assessment, 2011, p. 9). In New Zealand the combined Health and Physical Education Curriculum has a strong sociocritical orientation with a focus on four areas - personal health and physical development, movement concepts and motor skills, relationships with others, and healthy communities and environments (Culpan & Bruce, 2014; Ministry of Education, 1999, 2007). Motor competencies, safe/healthy lifestyle, and

positive self-esteem and social functioning are the aims of physical education in the Flemish-speaking community of Belgium, while its French-speaking counterpart focuses on health, safety, expression, and sports culture. Although not an officially stated objective, the promotion of lifelong physical activity is also a traditionally accepted goal of physical education in Belgium (De Martelaer et al., 2014). Physical education in Switzerland aims to serve functions categorised as impressive (experiencing wellbeing and feeling healthy), explorative (discovering the body), expressive (creating and presenting movements), productive (exercising and training), comparative (challenging oneself and competing) and co-operative (participating and being part of a team) (Pühse, Gerber, Menginsen, & Repond, 2005). In neighbouring Germany physical education has the double-mission of educating for sports, by introducing young people to ‘the culture of sports and physical activity’, and educating by sports, ‘to promote personality formation’ (Deutscher Olympischer SportBund, 2009, p. 5).

Turning our attention to what is said and done in the name of physical education on a daily basis, we must look to those who enact the subject in schools: young people and their teachers. Research with young people indicates that non-educational goals such as having fun and spending time with friends are valued by this group (Cothran & Ennis, 1998; Flintoff & Scraton, 2001; Garn & Cothran, 2006; Palomäki & Heikinaro-Johansson, 2011; Smith & Parr, 2007). A gender difference is also evident. Lyyra (2013), for example, found that girls prioritise health-related physical education and social and emotional skills, while boys prioritise physical activity and challenge. There is a sense from the literature that, generally speaking, young people value learning *in* the physical while teachers value learning *through* the physical (Smith & Parr, 2007). Cothran (2010) suggests that young people come to class with specific priorities and an in-class negotiation (spoken and unspoken) between these priorities and those aimed for by the teacher determines the outcomes of each lesson. Finnish physical education teachers report being successful in reaching the aim of ensuring students have positive physical activity experiences, while they describe the achievement of aims such as improved fitness and the enactment of regular physical activity as more difficult to achieve in practice (Palomäki & Heikinaro-Johansson, 2011). The studies of Smith and Parr (2007) and Green (2000, 2002) each take a sociological perspective in exploring the views of young people and teachers respectively. These authors stress that the purpose(s) ascribed to physical education by either group can only be fully understood in light of their predispositions towards the subject and the relationships and contexts within which teaching and learning takes place. Echoing the body of research on teachers’ occupational socialisation (Lawson, 1983a; 1983b) and value orientations (Chen & Ennis 1996; Curtner-Smith, 2001; Jewitt, Bain, & Ennis, 1995), Green (2002) maintains that physical education teachers’ ideologies of the subject are grounded in their values and predispositions and in their perceptions of interest and constraint evident in the local and national contexts within which they work.

Physical education teachers are understood to undergo a process of occupational socialisation which affects why and how they teach, with a subsequent impact on their students’ experiences of physical education lessons (Lawson, 1983a, 1983b). It has been further acknowledged that this socialisation process results in physical education teachers embodying one or more dominant value orientations, described by Gillespie as ‘a complex blend of intentions, beliefs and actions in practice [that] provide the lens through which teachers interpret and enact curriculum’ (2011, p. 59). Teachers’ beliefs and value

orientations have been the focus of much research and have been acknowledged as one of the keys to understanding and improving school physical education practice (Chen & Ennis, 1996; Ennis, 1992; Jewitt, Bain, & Ennis, 1995; Tsangaridou, 2006). The occupational socialisation process described by Lawson (1983a, 1983b) sees the value orientations of physical education teachers being influenced by significant people in their lives and by personal experiences of sport/physical activity and school physical education (a socialisation process known as acculturation), as well as by the physical education teacher education (PETE) programmes in which they are educated (professional socialisation) and the professional contexts within which they work (organisational socialisation). The value orientations and socialisation literature provides much information and context for how the views of physical education teachers on their subject matter may be formed and influenced. Less is known, however, about the formation and alteration of views of physical education teacher educators on their subject matter. Certainly this literature also applies to the majority of physical education teacher educators. They also go through the socialisation processes described by Lawson and they too form value orientations which influence their views and practices. However, much literature stops short of following the evolution of the views of physical education professionals past their time as pre-service and in-service teachers into their roles as teacher educators.

While the views of physical education teacher educators have been elicited on their PETE programmes and on the state of PETE in their respective countries (Andriamampianina & Si Moussa, 2005; Melnychuk, Robinson, Lu, Chorney, & Randall, 2011; Parker, Sutherland, Sinclair, & Ward, 2011), their views on the purpose(s) of physical education are more difficult to locate in the literature. Recent self-studies (see Ovens & Fletcher, 2014), although not focused on the purpose of the subject, have added to our understanding of the thinking of this population. Further, Muros Ruiz and Fernández-Balboa (2005) interviewed Spanish physical education teacher educators regarding the definition, principles and purposes of critical pedagogy in physical education, finding, in many cases, their knowledge and understanding to be limited and inconsistent with the literature. Mordal-Moen and Green (2014) discovered a privileging of the practical over the reflective in the discourses of physical education teacher educators in Norway. Participants in their case study saw the purpose of physical education as centred on the learning and acquisition of sport skills. Consistent with the socialisation and value orientations literature among physical education teachers, their views were rooted in their acculturation and occupational socialisation, as well as being strongly influenced by their professional contexts.

Through this paper we aim to supplement this research by exploring the views of an international group of physical education teacher educators on the purpose(s) of their subject and gaining an understanding of whether, how and why these views have changed over time.

Methodology

Participant selection

A combination of convenience and purposive sampling was used in the selection of participants. Convenience sampling is broadly understood as selecting participants who are easily accessible and willing to participate (Teddlie & Yu, 2007). Participants were selected from among the 53 attendees at an international research seminar on PETE. This convenience

sampling frame does admit a degree of bias in that those who chose to register for the seminar could be confidently described as research-active in the field of PETE. This research interest may be more pronounced in this sampling frame than among the general population of physical education teacher educators. The selection of participants was also purposive in that participants were selected from within the sampling frame with a specific purpose in mind (Patton, 2002). There were three selection criteria: (1) contributing to the education of post-primary physical education teachers, (2) holding a senior position in a given faculty (at least senior lecturer or equivalent), and (3) having at least five years of experience as a physical education teacher educator at third level, with at least 10 years of professional experience in the field of physical education. We should clarify that although this paper focuses on the views of participants regarding the purpose(s) of physical education, the selection criteria were framed by the purpose of the overall research project, such that it was desired to have participants with extensive experience in senior positions in order to investigate their career paths and professional views and experiences over time. In prioritising the geographical spread of participants it was decided not to have more than four participants from any one country. Because eight participants from one country met the selection criteria, four of these were selected for participation based on obtaining a range and depth of professional experience to inform the research. Of the 15 physical education teacher educators who met the selection criteria and who were invited to participate, all but one agreed.

Participants

Among the final fourteen participants (seven male and seven female), seven held the job title of professor, the job title of one was assistant professor and six worked under the title of senior lecturer. It is acknowledged that these titles encompass different responsibilities in different countries but the data demonstrated that all participants had a wealth of relevant experience through which to inform the data. Participants were based in seven countries: Belgium, Finland, Germany, Ireland, New Zealand, Switzerland and the USA. At the time of interview, the participants had an average of 20 years of experience as physical education teacher educators, ranging from 6 to 38 years. Given the many ways in which teacher educators are defined (Livingston, 2014), we should clarify that in this paper physical education teacher educators are defined as those educators based in third level institutions who educate, and support the ongoing professional development of, future and practicing teachers of school physical education. It is also important to stress that although this study is international in the sense that its participants are based in various countries, it is not a comparative study and the participants do not claim to represent the totality of views from their respective countries. Rather, our intention is to explore individual perspectives in a variety of contexts. Pseudonyms are used in the presentation of findings. A summary of the participants is presented in Table 1.

Table 1 Research participants

Pseudonym	Sex	Country	Years in PETE
Lars	M	Belgium	32
Elina	F	Finland	32
Hanna	F	Finland	15
Jenni	F	Finland	10
Mikko	M	Finland	12
Andreas	M	Germany	14
Karl	M	Germany	38
Cathy	F	Ireland	33
Sara	F	Ireland	11
Jane	F	New Zealand	18
Olivia	F	New Zealand	8
Max	M	Switzerland	27
Ian	M	USA	34
Josh	M	USA	6

Interviews

Individual semi-structured interviews were completed with thirteen physical education teacher educators. One participant chose not to be interviewed but wished to respond to the interview questions in writing. His responses were included in the analysis of data. Five of the interviews were carried out in person at a location convenient to the participant (in an office or a quiet location at a conference). For the other eight participants, interviews took place via Skype. The interviews, which were carried out by the first author, lasted an average of 68 minutes, ranging from 40 to 119 minutes. They began by exploring the participants' pathways into PETE and their experiences of working in the field. The next phase of the interviews, which is the focus of this paper, related to participants' views on the purpose(s) of school physical education, whether/how these views had changed over time and what influenced their views.

Data analysis

All interviews were transcribed, coded and thematically analysed by the first author. Data were analysed inductively (Patton, 2002; Strauss & Corbin, 1998) relying on the constant comparative method (Rubin & Rubin, 1995). Analyses of the study data consisted of three phases of coding: open, axial and selective (Strauss & Corbin, 1998). Open coding involved revisiting the transcripts and segmenting them into categories of information, somewhat dependent on the questions asked in the interviews. Categories included 'socialisation', 'career path', 'experience of being a physical education teacher educator', 'views on purpose', 'professional context', 'research', 'roles/responsibilities', 'challenges' and 'opportunities'. This was followed by axial coding, in which connections were made among categories and related concepts, allowing for a clearer understanding of the depth and

delineation of each category. Strauss and Corbin (1998, p. 124) describe this second stage as one of 'reassembling data that were fractured during open coding'. The final phase was selective coding. For the purpose of this paper, this phase involved the central phenomenon of physical education teacher educators' views on the purpose of school physical education and its codes, such as 'purpose', 'holistic', 'health', 'sport', 'obesity', 'physical activity', 'learning', 'changes in views', 'roots of views' and 'influence on views', being integrated with other categories and codes, such as the codes 'societal context', 'institutional context', 'educational context', 'colleagues' and 'expectations' under the 'professional context' category, and the codes 'influence of' and 'interaction with' under the 'research' category. As all participants were asked the same questions it was possible to interrogate the validity of identified relationships by examining their prevalence across cases. During coding, efforts were made to identify and carefully consider any negative cases (Lincoln & Guba, 1985). Other strategies suggested by Lincoln and Guba (1985) were also employed to improve the trustworthiness of the findings. Each participant received a copy of his/her transcription and was encouraged to clarify or comment on any aspects of the data. While data collection and analysis were carried out by the first author, the second and third authors were available for debriefing, which allowed for the discussion of emerging codes and hypotheses. Additionally, the first author took reflective fieldnotes throughout the research process in which she recorded thoughts, assumptions and possible biases so that these could be confronted during the analysis of data (Bogdan & Biklen, 2003).

In the presentation of findings participants' quotes have been edited to improve readability and to remove any expressions or grammatical nuances which may make a participant identifiable.

Findings and discussion

We now discuss the broad purpose of physical education shared by participants, how this purpose was framed, the boundary negotiations evident in the data, and whether, how and why the views of the participants changed over time. Each finding is discussed in the context of relevant literature.

Same picture, different frames

When the individual views of physical education teacher educators were explored, there was evidence of tentative agreement regarding the overarching purpose of physical education. Broadly speaking, the mentioned purposes of physical education shared the common aspiration of preparing young people for a lifetime of meaningful physical activity participation. As Elina, from Finland, explained simply, the goal of the subject is 'to support the lifelong physical activity of your students'. This is not to say that this was the only response given by each participant. Rather, preparing young people with the skills, knowledge and understanding to be able to participate fully in their respective movement cultures was the common thread weaving through the responses. It is worth noting, however, that a number of participants highlighted as a cause for concern a lack of evidence for the efficacy of physical education in achieving its overarching aim of lifelong physical activity. This is a concern that has also been highlighted in the literature, with recent papers (such as Armour & Harris, 2013) stressing the need to provide physical educators with suitable pedagogies which facilitate the improvement of their practice in this area.

One participant declined at first to give a specific purpose for physical education, contending that physical education does not have one defined purpose. Rather, its purpose is dependent on the context, the teacher and the individual student:

I wouldn't be drawn into saying what the purpose of physical education is because it's very context driven, not only by the school, the students, but also by whoever the teacher is and their disposition and values. (Sara, Ireland)

This reflection aligns with recent calls by scholars for a pluralist incarnation of physical education which serves a variety of purposes (Cothran, 2010; Ennis, 2014; Kirk, 2013; Penney, 2013), embracing what McNamee (2005, p. 17) refers to as the 'inherent openness of the concept of physical education: pluralism in activities; pluralism in values'. Although this participant was the only one to articulate the need to attend to context and individuality in terms of the purpose of physical education, the importance of tailoring physical education to meet the needs of individual students and contexts was touched on by all participants.

In a related finding, the data revealed that below the overarching purpose of preparing young people for continued meaningful involvement in physical activity more than one justificatory argument was made for physical education. In other words, the way that participants framed the main shared purpose of physical education differed somewhat, reflecting a range of perspectives on the value of physical activity. While all rooted the subject in learning, the various contributions such learning was seen to make differed between participants. Some, for example, framed their views within a context of the holistic development of young people: 'I think it's got a huge role in developing the whole person. Having students understand themselves, understand other people, understand the world around them and how all of those things interact and impact on each other' (Olivia, New Zealand). Others framed the purpose in terms of giving students access to a shared culture: 'It's part of our culture . . . sport is something really fascinating for some people and we should give children the chance to be able to participate' (Andreas, Germany). Physical health and avoiding sedentary lifestyles (not obesity prevention per se) was a frame employed by others:

In former times there was a concentration only on skills, that is, how can students learn to swim. But now we also look at how can physical activity lead to an active lifestyle and a healthy lifestyle and how can this aspect of swimming contribute to that. (Max, Switzerland)

Reflecting on this underlying justificatory plurality suggested for the subject, we are prompted to consider that a shared purpose is, perhaps, less important than agreement regarding the boundaries of the subject, 'where a coherent and valued field called physical education may begin and end' (Kirk, 2009, p. 140). We will now discuss where such boundaries were drawn by participants in this study.

Defining boundaries

Tinning (2012) highlights difficulties in attempting to define the boundaries of physical education. According to Penney, however, boundary work is especially important given that 'structural and symbolic boundaries are key to understanding and actively

engaging with stability and change in physical education' (Penney, 2013, p. 6). In addition to agreement regarding a broad aim of physical education being to equip young people for meaningful sustained physical activity participation, the participants in this study voiced aligning opinions concerning what the purpose of physical education was *not*. There was consensus that improving the fitness of young people was not the purview of physical education. Josh (USA), for example, explained: 'I don't think physical education is a place where you get kids fit . . . our place isn't to get kids fit, our place is to teach kids how to become fit and physically active'. Likewise, maximising *in-class* physical activity levels was not seen as a top priority by any, except insofar as this was a by-product of good teaching:

[Physical education teachers] need to teach in a way that allows what we know about effective teaching. If I'm going to learn a skill I have to practice a skill. So I should have a lot of physical activity in my classroom by virtue of the fact that it's effective teaching. It can then play into I'm also physically active. (Cathy, Ireland)

The participants were also in agreement that physical education should not be held responsible for reversing rising obesity levels. In a number of cases, when obesity was mentioned, they voiced a preference to see the role of physical education as tangentially contributing to a reduction in inactivity levels or sedentariness rather than obesity *per se*. Combating obesity was not seen as a central goal of physical education by any of the participants, although they did feel that the subject could contribute through the achievement of its actual goal of promoting lifelong engagement in meaningful physical activity:

There is this perception in society, or by governments in particular, that education should fix all the evils and the ills of society. And of course for physical education the big thing is around declining physical activity rates and obesity. Now, I don't believe that we can fix that. . . . [Physical education will] contribute towards helping to solve some of those issues. But I don't think that we can actually solve them on our own. (Jane, New Zealand)

We do not focus specifically on obesity, we are focusing more on physical activity . . . we have different lectures and activities focusing on obesity and how to deal with obesity, obese students and so on, of course, but it's not the priority. (Lars, Belgium)

Students will say, if I ask them in a module that I'm involved in 'What is the purpose of physical education?' 'What can you feasibly do in...' you know, and if somebody will say 'Well, we're somewhat responsible for obesity' I can't help but say 'No, you're not, you're a scapegoat for obesity, what's the feasibility of you actually addressing in a class once a week, whatever?' So I don't entertain it, as such, which may be an issue. Maybe I should entertain it and be a bit more critical in relation to 'Okay, well, let's work through this'. (Sara, Ireland)

Given the varied educational and societal contexts within which the participants work, it was somewhat surprising to note the level of consensus regarding what the purpose of physical education is not, especially in light of research and policy discourses which point to

school physical education as a key site for increasing physical activity and combating obesity (Fairclough & Stratton, 2005; McKenzie & Lounsbury, 2009, 2014; Tinning, 2009). Indeed, the participants did demonstrate an acute awareness of both the need to be sensitive to societal expectations and the need to legitimise physical education within school and institutional contexts. Echoing arguments put forward in the literature (e.g. Cale & Harris, 2013; Evans, Rich, & Davies, 2004; Gard & Wright, 2001), however, all contended that, while physical education may contribute to a reduction in obesity levels, such a reduction is not, nor should it be, a central goal of the subject. We will return to the issue of context in the final part of this section but first we will examine whether and how the participants' views of the purpose(s) of physical education have altered over time.

Changing views over time

Green (2002) characterised teachers' philosophies of physical education as processes rather than states, inclined to change over time. A similar tendency towards change was evident in the views of most, although not all, participants in this study. Among those whose views of the purpose(s) of physical education had changed, Josh went from believing physical education should aspire to addressing many goals to believing in a narrower focus for the subject, namely 'to prepare children to be physically active later in life'. Others had broadened their conception of the purpose(s) of physical education over time:

My view was always about ecological integration, about building people's self esteem and self worth through movement and to develop them as people . . . So that's where I started and then it's become really holistic in terms of understanding that movement, sport, physical activity contributes to not just the individual for all of those reasons but also to society. (Jane, New Zealand)

[My view has broadened to include] a need for the development of social interactive competence due to the impact of the Internet, computer games and social networks, an influence which also has decreased the amount of daily free time play and motor activities. (Karl, Germany)

The most commonly mentioned shift was seen among those who had altered their views from a sport/performance orientation to a view of physical education's purpose as being to prepare students for physically active lives. Jenni, from Finland, explained that 'nowadays I think that different sports skills are not as important to me as they were, for example, ten years ago', while Mikko, also from Finland, stated that 'for sure I was more sports oriented [in the past] . . . I'm tempted to say that [I saw the subject's purpose as] to prepare better elite athletes'. Andreas noted a similar change in his view:

When I was beginning to study I thought, well, it's doing sports, and we are doing sports in school and that's done. But that's not enough . . . We have to make clear that our physical education students do more than teaching sports. (Andreas, Germany)

These changes in the views of many participants regarding the purpose(s) of physical education may be significant because they indicate the possibility of a break from the cyclical, self-replicating nature of PETE, whereby the strong influence of acculturation and

occupational socialisation reproduces itself, as evidenced among the teacher educators in the study of Mordal-Mohen and Green (2014). Of course this reproduction is not always a negative one. A minority of participants in this study recorded having always had the same view of the purpose of physical education, that of preparing young people for lifelong physical activity. These views were framed by such terms as being student-centred, creating self-directed learners or promoting holistic health and were clearly rooted in their acculturation and professional socialisation. Elina, for example, shared that the authoritarian style of her physical education teacher made her vow to prioritise being student-centred in her own teaching career, while Cathy's undergraduate programme instilled in her a strong orientation towards self-directed learning which she has maintained throughout her PETE career. We will now examine the influences which served to alter the views of many physical education teacher educators in this study.

Influence of research and context

Overall, sources of influence regarding the altered views of participants on the purpose(s) of physical education included personal reflections, time spent in schools with teachers and students, and discussions with colleagues within and outside the physical education field. Among the most salient themes in this category, however, were findings from research, a responsibility to respond to issues in society and a need to legitimise physical education within school and university contexts. Participants frequently prefaced or followed their responses with references to these latter influences.

The participants' own research findings and those of others were commonly cited as reference points for their views on the purpose(s) of physical education:

I don't think there's anything out there solid that shows that if we force kids to be physically active they're gonna be physically active later on . . . Some people say 'oh, you know, there's plenty out there' but the [study] I want to see, I've never seen it. (Josh, USA)

We know [from research] that we have about eight to fifteen minutes of vigorous physical activity within one lesson, so there is no adaptation possible. So on one hand there are a lot of people coming from other disciplines telling us what we have to do, or telling politicians what they have to do in school. On the other hand it could not work. And this is an argument for [shifting] focus from doing sports to a focus on how and why we are doing sports, while we are doing sports. (Andreas, Germany)

This is a particularly notable finding when we compare the views of participants in this study on the purpose(s) of physical education with those expressed by the physical education teacher educators in the study of Modal-Mohen and Green (2014). In that study the purpose of the subject was framed by sports and performance discourses, a theme rarely mentioned in this study, except in relation to a previously held view. However, the participants in the study by Mordal-Mohen and Green were mentioned as not being research active, while our participants were chosen from among participants at a research seminar and they cited research findings as influential on their views. We wonder to what extent the difference between the views expressed by the participants in the study of Modal-Mohen and Green and

those of our participants could be explained by their understanding of and interaction with research. It would be interesting to investigate further the interaction between research and the views and subsequent practices of physical education teacher educators.

Physical education's location within broader societal contexts was acknowledged in the explanations of many regarding their expressed views. This was an area where the data betrayed a sense of ongoing negotiation:

I find it troublesome that people who are in our business dismiss the public health orientation outright because it automatically neglects potentially other agendas, other purposes of physical education. They always look at it as either or and I don't think that needs to be the case. (Ian, USA)

[The job of the physical education teacher] is changing now and the big challenge for our profession is do we stay back, do we stay where we have been? Because society changes either way and [we should] start to think differently about the teachers' job as being more the expert in supporting wellbeing and supporting lifelong physical activity. (Elina, Finland)

I have the feeling we are not allowed to instrumentalise physical education for issues, for problems in society, but on the other hand we are not allowed, or we shouldn't close our eyes and not look at what happens in society. (Max, Switzerland)

The sentiments above call to mind an argument recently put forward by Penney that 'external inputs and particular external relations are either legitimated or potentially challenged and negated by structures and relations *internal* to physical education' (2013, p. 7, original emphasis).

Educational contexts were found to be particularly influential regarding the views held by participants and how these views translated into practice. Cuts to resources and funding was a challenge faced by many. Jane, for example, expressed her struggles amid increasing student numbers and decreasing funding: 'I fight really hard to maintain the philosophical integrity of what we are doing. And at the moment I'm hanging in there, just'. A number of participants commented on the importance of legitimising the place of physical education within their respective institutions. Further, many participants saw the perceived legitimacy of their views of physical education resting with future teachers and with the degree to which these teachers modelled good practice and represented physical education appropriately in their schools. Some scholars warn that struggles for legitimacy and related reactive behaviours *may* mean that physical education will be appropriated for purpose(s) other than those desired by our participants. Although not advocating this future, Tinning (2012), for example, suggests that the next focus of physical education may centre on obesity prevention, an idea which would oppose the views of participants in this study. The degree to which physical education teacher educators and teachers are influenced by or exert influence over the contexts within which they work, and their understanding of the place of physical education within education and society, appears to speak loudly to the likelihood of the purpose(s) they ascribe to physical education being achieved.

The national curriculum/standards had a bearing on the views of some regarding the purpose of physical education. For example, the holistic orientation of the New Zealand curriculum was echoed in the views shared by Jane and Olivia regarding the broad goals towards which physical education should strive. As Jane described: '[Our curriculum is] really holistic, so that really changes what we do and how we teach and the content that we want students to learn about'. Similarly, for Hanna, lifelong physical activity was termed as 'something which is in our culture in Finland and it's in our curriculum. We always say that. It's the truth for us'. This is not to suggest that the participants were unthinking reproducers of national curricula. In fact, in a number of cases the participants were themselves involved in the construction of the physical education curricula/standards within their regions/countries. Rather, it reminds us that context matters and speaks to the importance of being aware of the interaction between the views of physical education teacher educators and the contexts within which they work. This is reminiscent of the stress placed on the importance of context by Green (2002) and Smith and Parr (2007) in their studies of the purpose(s) ascribed by teachers and young people to the subject.

Concluding thoughts

Similarly to physical education teacher educators in the study by Muros Ruiz and Fernández Balboa (2005), many of our participants commented, after their interviews, on the benefit of taking the time to discuss their views on their subject matter. They found that their participation in the interviews had stimulated their thinking and prompted an intention to reflect further with colleagues on the purpose and aims of their work. These comments highlight the importance of discussions such as those that took place during this research. It stands to reason that the curricular values held by pre-service and practicing physical education teachers cannot be effectively developed or positively influenced by teacher educators unless such teacher educators have adequately interrogated and understood the roots of the curricular values underpinning their own views.

Given that the process of professional socialisation, that which takes place during initial teacher education, has thus far demonstrated little impact on the value orientations of physical education teachers (Curtner-Smith, 1999; Gillespie, 2011; Lawson & Stroot, 1993), we suggest that there is particular merit in the reflections of physical education teacher educators being shared openly with pre-service teachers. The participants in this study entered PETE with various sporting, education and health views and for many, although not all, these views underwent a process of change. The opportunity we suggest for PETE is in physical education teacher educators reflecting openly with their students on the views they themselves ascribe to physical education and explaining the influences that have acted to either alter or strengthen these views throughout their careers.

We note that many of the influences acting on the views of the physical education teacher educators in this study regarding the purpose of physical education are influences also known to affect practicing teachers (Curtner-Smith, 2001; Green, 2000; 2002; Lawson, 1983b). Both physical education teachers and teacher educators are affected by their own acculturation, by national curricula/standards, by day-to-day time and resource constraints, by societal expectations and by the need to represent and advocate for a subject which is not often granted equal status to others within their respective educational contexts. We see in

this commonality an opportunity for PETE. We suggest a possibility, in the open reflection of physical education teacher educators on the interaction between their views and the institutional and societal contexts within which they work, to provide future teachers with alternative value pathways paved with relatable explanations and shared experiences. A consideration of recent self-studies in the field may prove a useful supplement to such discussions (e.g. Ovens & Fletcher, 2014).

This paper relies on data collected with 14 teacher educators from seven countries. It is not intended as a reflection of the general population of physical education teacher educators, either internationally or in a given country. We hope, instead, that by shining a light on the views of this small group we have contributed to knowledge on how different purpose(s) can be ascribed to physical education, and the influences that can act on the views and subsequent practices of these educators. The influence of both context and research on the views of physical education teacher educators was particularly interesting in this study, pointing to areas where further research may be warranted.

Acknowledgements

We would like to express sincere appreciation to the anonymous reviewers who invested considerable thought and time into the improvement of this paper. This work was made possible through funding received from the Ministry of Education and Culture, Finland.

References

- Andriamampianina, P., & Si Moussa, A. (2005). The training of physical education teachers in France and China: A comparative analysis of curricula and attitudes. *International Review of Education*, 51, 23-34.
- Armour, K., & Harris, J. (2013). Making the case for developing new PE-for-health pedagogies. *Quest*, 65(2), 201-219.
- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., Sandford, R., & BERA Physical Education and Sport Pedagogy Special Interest Group. (2009). The educational benefits claimed for physical education and school sport: An academic review. *Research Papers in Education*, 24(1), 1-27.
- Bogdan, R., & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theory and methods* (4th ed.). New York, NY: Pearson.
- Cale, L., & Harris, J. (2013). Fitness testing in physical education – a misdirected effort in promoting healthy lifestyles and physical activity? *Physical Education and Sport Pedagogy*, 14(1), 89-108.
- Chen, A., & Ennis, C. D. (1996). Teaching value-laden curricula in physical education. *Journal of Teaching in Physical Education*, 15(3), 338-354.
- Cothran, D. (2010). Students' curricular values and experiences. In M. O'Sullivan & A. MacPhail (Eds.), *Young people's voices in physical education and youth sport* (pp. 49-62). London: Routledge.

- Cothran, D. J., & Ennis, C. D. (1998). Curricula of mutual worth: Comparisons of students' and teachers' curricular goals. *Journal of Teaching in Physical Education, 17*, 307-326.
- Culpan, I., & Bruce, J. (2014). Mandate and liberate. Physical education and health in Aotearoa/New Zealand. In M. K. Chin, & C. R. Edginton (Eds.), *Physical education and health. Global perspectives and best practice* (pp. 341-353). Urbana, IL: Sagamore Publishing.
- Curtner-Smith, M. (1999). The more things change the more they stay the same: Factors influencing teachers' interpretations and delivery of national curriculum physical education. *Sport, Education & Society, 4*(1), 75-97.
- Curtner-Smith, M. (2001). The occupational socialization of a first-year physical education teacher with a teaching orientation. *Sport, Education and Society, 6*(1), 81-105.
- De Martelaer, K., Seghers, J., Cardon, G., Haerens, L., De Boever, E., & Cloes, M. (2014). Physical education stimulating a healthy lifestyle and critical sports consumption in Belgium. In M. K. Chin, & C. R. Edginton (Eds.), *Physical education and health. Global perspectives and best practice* (pp. 43-55). Urbana, IL: Sagamore Publishing.
- Deutscher Olympischer SportBund. (2009). *Memorandum on physical education and school sports* (adopted by DOSB, DSLV and dvs in September 2009). Frankfurt: Author.
- Ennis, C. D. (1992). The influence of value orientations in curriculum decision making. *Quest, 44*, 317-329.
- Ennis, C. D. (2014). What goes around comes around . . . or does it? Disrupting the cycle of traditional, sport-based physical education. *Kinesiology Review, 3*, 63-70.
- Evans, J., Rich, E., & Davies, B. (2004). The emperor's new clothes: fat, thin, and overweight. The social fabrication of risk and ill health. *Journal of Teaching in Physical Education, 23*, 372-391.
- Fairclough, S., & Stratton, G. (2005). 'Physical education makes you fit and healthy'. Physical education's contribution to young people's physical activity levels. *Health Education Research, 20*, 14-23.
- Flintoff, A., & Scraton, S. (2001). Stepping into active leisure? Young women's perceptions of active lifestyles and their experiences of school physical education. *Sport, Education and Society, 6*(1), 5-21.
- Gard, M., & Wright, J. (2001). 'Managing uncertainty': Obesity discourses and physical education in a risk society. *Studies in Philosophy and Education, 20*, 535-549.
- Garn, A. C., & Cothran, D. J. (2006). The fun factor in physical education. *Journal of Teaching in Physical Education, 25*, 281-297.
- Gillespie, L. B. (2011). Exploring the 'how' and 'why' of value orientations in physical education teacher education. *Australian Journal of Teacher Education, 36*(9), 58-74.
- Green, K. (2000). Exploring the everyday 'philosophies' of physical education teachers from a sociological perspective. *Sport, Education and Society, 5*(2), 109-129.

- Green, K. (2002). Physical education teachers in their figurations: A sociological analysis of everyday 'philosophies'. *Sport, Education and Society*, 7(1), 65-83.
- Hansen, D. T. (2008). Values and purpose in teacher education. In M. Cochran Smith, S. Feimen-Nemser, & D. J. McIntyre (Eds.), *Handbook of research on teacher education. Enduring questions in changing contexts* (3rd ed., pp. 10-26). London: Routledge.
- Hardman, K. (2011). Global issues in the situation of physical education in schools. In K. Hardman, & K. Green (Eds.), *Contemporary issues in physical education* (pp. 11-29). Maidenhead: Meyer & Meyer Sport.
- Heikinaro-Johansson, P., Palomäki, S., & McEvoy, E. (2014). Embracing change and increasing physical activity in Finland. In M. K. Chin, & C. R. Edginton (Eds.), *Physical education and health. Global perspectives and best practice* (pp. 163-175). Urbana, IL: Sagamore Publishing.
- Jewett, A. E., Bain, L. L., & Ennis, C. D. (1995). *The curriculum process in physical education* (2nd ed.). Madison, WI: Brown & Benchmark.
- Kirk, D. (2009). A physical education for the future or a future for physical education. In L. D. Housner, M. W. Metzler, P. G. Schempp, & T. J. Templin (Eds.), *Historic traditions and future directions of research on teaching and teacher education in physical education* (pp. 137-148). Morgantown: Fitness Information Technology.
- Kirk, D. (2010). *Physical education futures*. London: Routledge.
- Kirk, D. (2013). Educational value and models-based practice in physical education. *Educational Philosophy and Theory*, 45(9), 973-986.
- Kirk, D., & MacDonald, D. (2001). The social construction of PETE in higher education: Toward a research agenda. *Quest*, 53(4), 440-456.
- Lawson, H. A. (1983a). Toward a model of teacher socialization in physical education: The subjective warrant, recruitment, and teacher education (part 1), *Journal of Teaching in Physical Education*, 2, 3-16.
- Lawson, H. A. (1983b). Toward a model of teacher socialization in physical education: Entry into schools, teachers' role orientations, and longevity in teaching (part 2), *Journal of Teaching in Physical Education*, 3, 3-15.
- Lawson, H. A. (1991). Future research on physical education teacher education professors. *Journal of Teaching in Physical Education*, 10, 229-248.
- Lawson, H., & Stroot, S. A. (1993). Footprints and signposts: Perspectives on socialization research. *Journal of Teaching Physical Education*, 12, 437-46.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Livingston, K. (2014). Teacher educators: Hidden professionals? *European Journal of Education*, 49(2), 218-232.

- Lyyra, N. (2013). *Pedagogical dimensions in physical education inventory: Evaluating reliability and validity by using confirmatory factor analysis*. Studies in sport, physical education and health 198. Jyväskylä: University of Jyväskylä.
- McKenzie, T. L., & Lounsbery, M. A. F. (2009). School physical education: The pill not taken. *American Journal of Lifestyle Medicine*, 3, 219-225.
- McKenzie, T. L., & Lounsbery, M. A. F. (2014). The pill not taken: Revisiting physical education teacher effectiveness in a public health context. *Research Quarterly for Exercise and Sport*, 85(3), 287-292
- McNamee, M. (2005). The nature and values of physical education. In K. Green & K. Hardman (Eds.), *Physical education: Essential issues* (pp. 1-20). London: Sage.
- Melnychuk, N., Robinson, D. B. Lu, C., Chorney, D., & Randall, L. (2011). Physical education teacher education (PETE) in Canada. *Canadian Journal of Education*, 34(2), 148-168.
- Ministry of Education. (1999). *Health and physical education in the New Zealand curriculum*. Wellington: Learning Media.
- Ministry of Education. (2007). *The New Zealand curriculum*. Wellington: Learning Media.
- Mordal-Moen, M., & Green, K. (2014). Neither shaking nor stirring: a case study of reflexivity in Norwegian physical education teacher education. *Sport, Education and Society*, 19(4), 415-434.
- Morgan, W. J. (2006). Philosophy and physical education. In D. Kirk, D. MacDonald, & M. O'Sullivan (Eds.), *The handbook of physical education* (pp. 97-108). London: Sage.
- Muros Ruiz, B., & Fernández-Balboa, J. M. (2005). Physical education teacher educators' personal perspectives regarding their practice of critical pedagogy. *Journal of Teaching in Physical Education*, 24, 243-264.
- National Council for Curriculum and Assessment. (2011). *Physical education draft curriculum framework*. Dublin: Author.
- O'Sullivan, M. (2004). Possibilities and pitfalls of a public health agenda for physical education. *Journal of Teaching in Physical Education*, 23, 392-404.
- Ovens, A., & Fletcher, T. (Eds.). (2014). *Self-study in physical education teacher education: Exploring the interplay of practice and scholarship*. Dordrecht: Springer.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). London: Sage.
- Penney, D. (2013). Points of tension and possibility: Boundaries in and of physical education. *Sport, Education and Society*, 18(1), 6-20.
- Pühse, U., Gerber, M., Menginsen, W., & Repond, R.M. (2005). Physical education in Switzerland. In: U. Pühse, & M. Gerber (Eds.), *International comparison of physical education: concepts, problems, prospects* (pp. 630-658). Oxford: Meyer & Meyer Sport.

- Palomäki, S., & Heikinaro-Johansson, P. (2011). *Liikunnan oppimistulosten seuranta-arviointi perusopetuksessa [National evaluation study of physical education learning outcomes in basic education]*. Helsinki: Finnish National Board of Education.
- Parker, M., Sutherland, S., Sinclair, C., & Ward, P. (2011). Not surprised, but concerned: The professoriate's reaction to PETE doctoral education in the United States. *Journal of Teaching in Physical Education, 30*, 157-177.
- SHAPE America (2014). *National standards. Physical education*. Retrieved from <http://www.shapeamerica.org/standards/>
- Smith, A., & Parr, M. (2007). Young people's views on the nature and purposes of physical education: A sociological analysis. *Sport, Education and Society, 12*(1), 37-58.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Teddle, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research, 1*(1), 77-100.
- Tinning, R. (2009). Who pushed Humpty Dumpty? Dilemmas in physical education. In L. D. Housner, M. W. Metzler, P. G. Schempp, & T. J. Templin (Eds.), *Historic traditions and future directions of research on teaching and teacher education in physical education* (pp. 149-154). Morgantown: Fitness Information Technology.
- Tinning, R. (2012). The idea of physical education: A memetic perspective. *Physical Education and Sport Pedagogy, 17*(2), 115-126.
- Trost, S. G. (2006). Public health and physical education. In D. Kirk, D. MacDonald, & M. O'Sullivan (Eds.), *The handbook of physical education* (pp. 161-187). London: Sage.
- Tsangaridou, N. (2006). Teachers' beliefs. In D. Kirk, D. MacDonald, & M. O'Sullivan (Eds.), *The handbook of physical education* (pp. 486-501). London: Sage.
- Rubin, H. J., & Rubin, I. S. (1995). *Qualitative interviewing. The art of hearing data*. London: Sage.

III

AN EXPLORATION OF THE INFLUENCE OF PROFESSIONAL RELATIONSHIPS ON THE CAREER PATHWAYS OF TEACHER EDUCATORS

by

McEvoy, E., Heikinaro-Johansson, P., & MacPhail, A. (2018)

European Physical Education Review

Reproduced with kind permission by Sage.

An exploration of the influence of professional relationships on the career pathways of physical education teacher educators

European Physical Education Review
1–16

© The Author(s) 2018

Reprints and permission:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/1356336X18785106

journals.sagepub.com/home/epe



Eileen McEvoy

Faculty of Sport and Health Sciences, University of Jyväskylä, Finland

Pilvikki Heikinaro-Johansson

Faculty of Sport and Health Sciences, University of Jyväskylä, Finland

Ann MacPhail

Department of Physical Education and Sport Sciences, University of Limerick, Ireland

Abstract

This paper focuses on the professional journeys of 14 mid- and late-career teacher educators in seven countries in the subject area of physical education. Data was gathered through two rounds of semi-structured interviews and revealed a strong emphasis on the professional relationships impacting upon participants' entry to and development within the profession. Career interest development, career choice and career performance were all affected by the people with whom participants formed relationships throughout their careers. The findings are discussed with reference to the role of teacher educators in selecting, encouraging and supporting their teacher education colleagues.

Keywords

Career, mentor, physical education, relationship, teacher educator

Introduction

Research examining those who teach teachers has been forthcoming with increasing frequency over the past 15 years. Broad themes receiving attention have included the professional identities of teacher educators (Erickson et al., 2011; Hökkä et al., 2016; Izadinia, 2014; Tryggvason, 2012),

Corresponding author:

Eileen McEvoy, Faculty of Sport and Health Sciences, PO Box 35, FI-40014 University of Jyväskylä, Finland.

Email: epmcevoy@gmail.com

their professional development (Ben-Peretz et al., 2010; MacPhail, 2017; Swennan and Bates, 2010; van der Klink et al., 2017), and their practice (Bronkhorst et al., 2011; Gelfuso, 2017; Vanassche and Kelchtermans, 2014). There has also been a significant presence of teacher educators willing to share their own professional stories, practices and insights with a view to informing teacher education practice and pedagogy, as reflected in a number of recent edited books (Loughran and Hamilton, 2016; Swennen and van der Klink, 2009; Williams and Hayler, 2015).

Regarding the professional journeys of teacher educators, much empirical research to date has focused on the initial socialisation and early-career experiences of this population, with particular reference to transitions from the role of school teacher to work in higher education (e.g. Harrison and McKeon, 2008; Russell and Loughran, 2010). Studies looking at the mid- and late-career stages of teacher educators have also emerged, although with less frequency (Griffiths et al., 2014; Kosnik et al., 2013; Montenegro Maggio, 2016). Griffiths and colleagues (2014) explored the career experiences and landmarks of 12 mid-career teacher educators in England. These authors found that as the teacher educators progressed through their careers their sense of professional identity increased as they were given professional acknowledgements and key management and research responsibilities. In their study, relationships with others were foregrounded as being a particularly important contextual factor influencing the professional journeys of participants. In her study of Chilean teacher educators, Montenegro Maggio (2016) stresses the social and cultural situatedness of career pathways of teacher educators. The work of Kosnik et al. (2013) focused on literacy teacher educators in four countries, exploring their knowledge, identities and career turning points. Their participants pointed to influential experiences, relational interactions and practices which shaped their professional identities and approach to their role. Most reported their careers had followed a serendipitous career path with few having planned to end up in academia.

It has been suggested that studying groups of academics within their professional fields can provide useful insights into the professional lives of contemporary academics (Boyd and Smith, 2016). Kosnik and colleagues have called for more discipline-focused research dealing specifically with the lives and work of mid- and late-career teacher educators, in line with the work they completed with literacy teacher educators (Kosnik et al., 2015). The importance of uncovering the professional journeys and career decisions of mid- and late-career teacher educators lies in the explanatory value such research might hold for understanding better why it is these people, and not others, who are educating our future teachers, informing practice through research, and shaping teaching and learning practice in the discipline of education. More than 25 years ago Lawson called for more empirical research into those who teach teachers in the subject area of physical education. He argued specifically for more research into their motivations, work contexts, professional communities, socialisation and career pathways. He also highlighted the importance of exploring the distribution of formal power and informal influence within disciplinary communities that determines 'who gets what, when, how much and why' (Lawson, 1991: 233).

A recent scoping review investigated the literature on physical education teacher educators during the years since Lawson's seminal paper (McEvoy et al., 2015). The findings indicated that, echoing the extant literature, little research had investigated the career pathways of physical education teacher educators beyond the initial career stages. A recent special issue of *Sport, Education and Society* revealed the joys, challenges and questions of 30 early-career academics in the field of sport pedagogy across nine countries as they navigated neoliberal academic life (Enright et al., 2017). The study was innovative, seeing a group of professors openly provide advice in response to composite narratives reflecting the lived experienced of a group of early-career academics. Richards and colleagues also recently focused on early-career academics in

physical education, investigating the doctoral student socialisation experiences of 32 physical education doctoral students in the USA (Richards et al., 2017). Their findings, in keeping with those of an earlier study by Lee and Curtner-Smith (2011), demonstrated the importance of both supportive and challenging relationships to the development and early professional experiences of doctoral students. Self-studies and teacher educators' individual accounts of their own professional journeys have also contributed somewhat to our understanding of the careers and professional experiences of teacher educators in the field (e.g. Casey and Fletcher, 2012; Fletcher and Casey, 2014; Kirk, 2014; Kovar, 2004; MacPhail, 2011; Tannehill, 2005). However, the only identified paper involving an in-depth exploration of the careers of a group of later-career physical education teacher educators is that of Dodds (2005), which looked at the biographies, careers and socialisation of 54 female physical education teacher educators in the USA, with a specific focus on participants' experiences of being mentored during their careers. Mentors were found to provide support, challenge, exposure to opportunities, and modelling of professional conduct during the participating teacher educators' careers.

Responding to this identified gap in the literature, the research presented in this paper explores the professional journeys of 14 mid- and late-career teacher educators in seven countries within the subject area of physical education. In particular, the research focuses on the professional relationships formed throughout participants' careers and how these relationships influenced their career pathways.

Theory framing the study

To assist in the elucidation of data related to the professional journeys of participants, we refer to Lent et al.'s (1994; 2000; 2002) Social Cognitive Career Theory (SCCT), which was useful in stretching our thinking regarding this topic. This theory is rooted in social cognitive theory (Bandura, 1986) and emphasizes cognitive-person variables that enable people to influence their own career development, as well as contextual variables that enhance or constrain personal agency.

There are three interlocking models in SCCT: career interest, career choice, and career performance, all of which highlight the mediating effect of self-efficacy beliefs, outcome expectations and goal representations on career development. The interest model in SCCT specifies that individuals are likely to develop interest in activities in which they feel efficacious and from which they anticipate that there would be positive outcomes. The choice model views the development of career goals and choices as functions of the interaction between self-efficacy, outcome expectations and interest over time. Career choice is seen as a dynamic process in which a person and their environment mutually influence each other. An 'ability' factor, framed by one's achievement, aptitude, and past performance, is highlighted in the performance model. Ability serves as feedback from reality to inform one's self-efficacy and outcome expectation, which in turn influences performance goals and levels.

Although SCCT can be viewed as somewhat linear (with the interest model applying to a person prior to beginning a career, the choice model applying to the choice of career, and the performance model affecting the in-career years), Lent et al. (1994) do indicate that the models can repeat throughout a person's lifespan. Our data led us to view the theory as representing a spiral, the different stages of which feed forward to further iterations of the interest, choice and performance models. This is particularly useful when thinking of teacher educators. Each of our participants had initially developed an interest in becoming teachers of physical education in school. However, after they experienced the first cycle of developing interest, making the choice to enrol in an

undergraduate degree in physical education and reflecting on their performance (either as a student in higher education or, in some cases, as teachers in school), they then developed interest in becoming teacher educators/academics and made subsequent career choices which resulted in new performances to be reflected upon.

As the findings will illustrate, these cycles of interest development, career choice and performance were strongly affected by the people with whom participants formed relationships throughout their careers. As the most salient theme in the data, it is these relationships that will be the focus of the findings and discussion.

Methodological approach

This study was positioned within the social-constructivist paradigm, following a qualitative research design. Participants were purposively selected and invited to take part in two rounds of in-depth semi-structured interviews with the intention of recording and examining their voiced experiences and the meanings they attached to such experiences.

Participants

The selection of participants was influenced by a desire to include those in senior teacher education roles in order to investigate their professional journeys and experiences over time. There was also a wish to ensure a geographical spread of participants to allow for a cross-section of experiences from different contexts. With these priorities in mind, participant selection entailed a combination of convenience and purposive sampling (Patton, 2002; Teddlie and Yu, 2007).

Participants were selected from among the 53 attendees at an international research seminar which focused on teacher education within physical education. The selection was made according to three criteria: (1) contributing to the education of secondary physical education teachers; (2) holding a senior position in a given faculty (at least senior lecturer/associate professor or equivalent); and (3) having at least 10 years of professional experience in the field of physical education, with at least five of those years being as a physical education teacher educator in higher education. To ensure a geographical spread among participants, it was decided not to have more than four participants from any one country. Because eight participants from one country met the selection criteria, four of these were selected for participation based on obtaining a range and depth of professional experience to inform the research. Of the 15 teacher educators who met the selection criteria and who were invited to participate, all but one agreed.

There were seven women and seven men in the group of 14 teacher educators who participated. At the beginning of the data collection period, six held the job title of senior lecturer, one was an assistant professor and seven were professors. It is acknowledged that these titles encompass different responsibilities in different contexts, but the data demonstrated that all participants had a wealth of relevant experience which they could use to inform the research. At the beginning of the data collection period, the average number of years of experience as teacher educators among participants was 20, ranging from 6 to 38 years. All participants were based in universities, all but two held doctoral degrees, and the research/teaching/administration balance to which participants were expected to adhere varied according to their rank and institutional context. Participants were based in seven countries: Belgium, Finland, Germany, Ireland, New Zealand, Switzerland and the USA. It is important to note here that although this study is international, in the sense that its participants were based in various countries, it is not a comparative study and the participants do

not claim to represent the totality of views from their respective countries. Rather, they provide individual perspectives from a variety of contexts.

Data collection

In-depth semi-structured interviewing was the preferred data collection method for this study. Two rounds of individual in-depth semi-structured interviews were conducted. Two participants chose to conduct one of their interviews in person and respond to the questions for the other interview in writing. Of the 26 interviews conducted orally, nine were conducted in person at a location convenient to the participant (in an office or a quiet location at a conference). The other 17 interviews took place via Skype. The interviews lasted an average of 85 minutes. The average duration in the initial round of interviews was 68 minutes; the average in the follow-up interviews was 101 minutes. To increase the trustworthiness of the resulting data, participants each received a copy of their transcripts and were encouraged to clarify or comment on any aspects of the data after each interview.

The initial interviews, which took place in spring 2014, focused on gaining a general overview of the participants' professional pathways and their experiences of working in the field. Their views on their subject area (physical education) were also explored during this initial interview. Topics and questions in the initial interviews included:

- Please briefly describe your background, i.e. how you came to be in your current position.
- How would you describe your current position?
- What is it like to be a physical education teacher educator?

Following preliminary analysis of the initial interviews and a reflection on findings from a concurrent review of literature (McEvoy et al., 2015), the choice was made to focus the follow-up interviews, which took place in autumn 2015, on an in-depth exploration of the professional journeys of participants (their entry to the profession, landmarks and turning points in their careers, supports and barriers to career development). Questions in the follow-up interviews included:

- Looking back over your career, do you see particular moments/events/decisions/people as representing significant landmarks/turning points that shaped your professional journey or your development as a physical education teacher educator?
- What would you say were the high points and low points in your career?
- What factors affected your career decisions?

Following the initial interview, each participant was also asked to provide a copy of their curriculum vitae. This artefact was useful both in confirming general details provided in the initial interview and as a prompt in examining career decisions and turning points in more depth in the follow-up interview.

Data analysis

There is a degree of subjectivity to be acknowledged at this point regarding the data collection and analysis conducted in this study so that the reader may make an informed judgement regarding the findings presented. The participants spoke in detail about their lived experiences as they recalled them. The recalling and telling of these lived experiences were, however, necessarily filtered

through memory, the social construction of experiences by participants over time, and the social construction of experiences in the context of the interview. Following from this, participants' accounts were then analysed and interpreted by the first author, adding another layer of subjectivity. The second and third authors acted as critical friends, encouraging reflexivity and challenging assumptions. We acknowledge that the social reality of another cannot be objectively accessed and known (Smith and McGannon, 2017). The intention, rather, is to present the themes identified in the process of data analysis, while acknowledging that other themes and interpretations also exist.

A descriptive approach was taken to the analysis of data (Silverman, 2013). The overall data corpus for this research consisted of transcriptions of 36 hours and 51 minutes of audio recordings as well as the two interview responses submitted in written form. In all, this represented 745 pages of data (299,533 words). While not wishing to quantify the qualitative, we provide these figures to give a sense of the scope of the data corpus. In addition to this data corpus, reference was made throughout the analysis process to field notes taken by the first author before, during and after each interview, in addition to participants' *curricula vitae*.

The first phase of analysis involved listening to the interviews a number of times, to become familiar in a holistic manner with the experiences and narratives shared by participants, before breaking the data up for further analysis. As part of this process of familiarisation with the data, a brief one/two-page summary of the full narrative shared by each participant was also created to serve as an aid in retaining the whole picture of each participant as the data analysis continued.

The second phase of analysis involved exporting the full data corpus to Excel where it was divided into meaning units. Meaning units are defined by Elliot and Timulak as 'parts of the data that even if standing out of the context, would communicate sufficient information to provide a piece of meaning to the reader' (Elliot and Timulak, 2005: 153). These meaning units were created by reading carefully through the data and, as each new thought/piece of narrative was shared, a new unit was begun. In all, the data were divided into 2012 meaning units. The units were kept relatively large (approximately 150 words on average) so that the data did not become too fragmented and the clarity of the contextual meaning was retained. Each meaning unit was numbered chronologically so that it could be located again within the context of the original interview at all stages of analysis. As each meaning unit was created, it was assigned to the 'domain' to which it pertained (Elliot and Timulak, 2005: 154). The domains created for our data corpus were 'professional journeys', 'professional views', 'professional contexts', 'roles/responsibilities/experiences' and 'research'. Because the meaning units were large, they were often categorised within more than one domain, creating considerable overlap between domains.

The next phase of analysis involved categorising the meaning units within each domain. In the professional journeys domain, for example, categories included those such as 'entry to teacher education', 'identity', 'support', 'influence', 'turning point' and 'decision'. Within each category, units were further coded through a constant comparison of meaning units until all the data were sorted (Rubin and Rubin, 1995). In the 'entry to teacher education' category, for example, codes included 'being let in', 'prior relationships', 'chance', and 'showing promise'.

The final phase involved looking across categories in order to identify themes which were common and provided insight into the professional journeys of participants. By far the most salient theme, and thus the focus of this paper, was the significant influence of professional relationships on the professional journeys of participants.

Findings and discussion

This section begins with an overview of the initial career aspirations of participants before going on to discuss the influence of professional relationships on: (i) the participants' entry to the teacher education profession, (ii) their key career landmarks, and (iii) their professional learning as teacher educators. Pseudonyms are used in the presentation of findings.

All participants shared a passion for their subject area and had begun their careers intending to teach physical education in school. The participants' backgrounds and socialisation saw them develop interest in the subject area through factors such as parental influence, influence of exemplary teachers, positive experiences of sport/physical activity, an affinity for education, a wish to improve education and a belief in the positive outcomes that could be achieved for young people through physical education. Their decision to enrol in undergraduate programmes in the subject area was influenced by both their sense that it was something in which they could succeed (self-efficacy) and that it would result in what they considered to be positive outcomes (e.g. job security, job satisfaction, etc.).

It is notable that none of the participants began with aspirations towards the positions in which they eventually found themselves. As Elina said:

I never thought I would stay here. In my mind, I was going to be a PE teacher in school. That was kind of my goal. But just the circumstances drew me here. (Elina, Finland)

Similarly, Ian, from the USA, explained:

I mean, I did not put down a 5-, or a 10-, or a 15-, or a 20-year plan and say this is what I wanna do or I want to become the leading scholar . . . that was never my intention. (Ian, USA)

Andreas, from Germany, felt that:

This is one thing that you cannot plan. You're just studying at one university and . . . I think you're choosing the university because you want to become a teacher, a PE teacher. And it was, well, sort of an accident. (Andreas, Germany)

Jane, from New Zealand, explained that:

If someone had said to me even 15 years ago that I would have [reached the position I have now] I would never have dreamed that I could do that. (Jane, New Zealand)

This finding echoes the broader literature, in which teacher educators are often found to happen upon their careers in a somewhat unplanned, 'accidental' manner (Kosnik et al. 2013; Mayer et al. 2011).

Bloch (2012) describes the academic career path as similar to a funnel. At the top there are many PhD students entering but the funnel narrows quickly and only a few make it through the other side to a career in academia. It is worth interrogating further, therefore, what goes on inside this funnel and what determines who makes it through to the other side.

Entry to the profession

Morberg and Eisenschmidt (2009) remind us that there are commonly two routes to teacher education: one where a person remains in higher education, gains a PhD, and begins to teach as part of their academic role, and another where a person teaches in a school setting for considerable time before returning to higher education and taking up an academic role. While six participants in the current study spent several years teaching physical education in schools before entering teacher education, the others found themselves taking a relatively direct route from their undergraduate physical education degrees to researcher and teacher education positions within universities. For most, their transition into the teacher education profession was eased by pre-existing relationships with staff in higher education. Of the six who were teachers of physical education for considerable lengths of time before entering teacher education, all had some prior relationship with those with whom they first worked in teacher education. In many cases, they had acquired some experience supervising teachers in schools or working on professional development or research with members of faculty, as these participants explained:

There'd been a whole lot of new developments of senior school qualifications in physical education at that time and I was part of that development, I was leading it, or participating in it on behalf of our school, so I was working with those people who were also, who were leading it, essentially . . . and so I guess when this job came up I guess that [gave me the feeling] that possibly [I] could do it, 'cause [I] knew some of the people. (Jane, New Zealand)

I kind of became related with the university, they would send me practicum students, field experience students . . . And it started me thinking and, you know, I kind of started seeking out opportunities at the university, became affiliated with [name of professor], and it kind of paved the way for me, you know, to move up. (Josh, USA)

I was a student who was on the faculty board and [later] I was head of academic affairs . . . I was working with the professor of health sciences . . . [that made me think that] it's okay that I am coming [to join the faculty from teaching]. (Hanna, Finland)

For those who remained in higher education without spending more than a year or two teaching in schools, many had also built relationships with influential faculty early on. Lars and Max, for example, developed professional relationships with professors while undergraduates:

After first year [as an undergraduate], [the professor] invited me to become a student assistant. For me, it was the beginning of a very long story. Because it was the first step in the university staff. It was an invitation to become a member of the group teaching students and it gave me the motivation or the feeling that I was interested in teaching physical education students. (Lars, Belgium)

[As an undergraduate student] I was successful, the lecturers and so on saw that I was very much in this field and was motivated to do that and so they gave me special tasks and this made me happy and proud. (Max, Switzerland)

Similarly, Mikko described the feeling of being 'let in' by a professor:

I knew that this [professor], his position, that it was going to open in some years. But still I knew that with only a master's degree it wouldn't be enough to get the position. And when [the professor], he told me that there is an open position I was thinking that, okay, this is a green light for my further studies to

get the eligibility to apply for this position. So, that was the starting point. I was thinking that, okay, now they are letting me in. (Mikko, Finland)

This sense of being ‘let in’ to the profession was central to the early teacher education experiences of many participants. Most had formed relationships with existing faculty who were, in essence, ‘gatekeepers’ for the profession. This is not to suggest for a moment that participants did not enter the profession on merit. Rather, the data demonstrated that in many cases existing faculty identified some promise in the participants when they encountered them and endeavoured to nurture this promise and encourage continuation towards positions within higher education.

Considering these findings from the perspective of SCCT, there are several interlocking factors at work here. We see in the data the sense of having been selected giving the participants ‘motivation’, making them ‘happy and proud’, that it was ‘okay’ that they entered. It gave them the ‘feeling that I could do it’ or ‘paved the way’. These quotations portray strongly how self-efficacy and outcome expectations, mediated by the relationships formed with key gatekeepers, created or strengthened interest among the participants in entering the teacher education profession. None of the participants foresaw a career in higher education until they were invited and encouraged to consider this and their career expectations were altered. This is exemplified by Josh, who, having explained that he had developed an interest in joining the university, went on to explain that it was the influence of an existing staff member who turned his interest into a choice and subsequent action:

He kind of pushed me into it. You know, it’s hard to leave something you’ve been doing for a long, long time and try something different. Especially when I was successful. (Josh, USA)

These instances of existing faculty members encouraging teacher educators to pursue doctorates or teacher educator roles were similar to those found among literacy teacher educators by Kosnik et al. (2013).

Within teacher education, participants went on to make new career choices and professional relationships continued to be influential at key career landmarks.

Key career landmarks

When asked to identify landmarks or turning points in their professional journeys, specific achievements, such as attaining a master’s or PhD or reaching full professorship, as well as changing from one institution to another, were common and not unexpected responses. In addition, most participants noted as landmarks meeting people who would go on to provide mentorship and support during their careers:

He’s just been an immense mentor for me, just huge. He directed opportunities, because he was heavily involved in leading in physical education and education, he gave opportunities to me, or directed me towards opportunities . . . And then if I needed help he would be there to help me. And he’s just been absolutely huge really. He’s mentored me, you know, for years. (Jane, New Zealand)

In my very first job at university, I became acquainted with a more senior professor . . . he became sort of an informal mentor and sort of gave me some heads-ups and kind of kept me from making mistakes and pointed me in the right direction. (Ian, USA)

Some of the factors influencing the decisions participants made regarding their careers, such as to do a master's or PhD, to become a teacher educator, to go for promotion or to change institutions, included interest factors such as a wish to do more research or to have a stronger impact on teachers and young people, and more practical factors such as family circumstances, a desire for job security, or a PhD being a requirement within a position. The impact of professional relationships on the career decisions participants made was also clear in the data. Ian and Lars, for example, were strongly encouraged by their mentors to pursue their careers in teacher education:

By the middle of spring semester, that's when [my master's supervisor] and I started to have some conversations about, you know, carrying on and doing more. Because basically, what he argued was that, you know, a master's degree is nice and dandy but it really doesn't help you that much and he said, you know, you've got the tools, you've got the energy, the interest. I think you would be a very good potential doctoral student. (Ian, USA)

Then we had a meeting together and he said . . . 'you are in a very nice position, a very nice moment and very nice context to get this position and then if you are doing your best you have a chance to become a permanent assistant here and to have a permanent job for the rest of your life'. (Lars, Belgium)

Andreas, on the other hand, was influenced by the advice of his peers:

I was talking to some PhD applicants and they told me that, sure, there are opportunities, but you should look at the conditions, there are non-permanent positions, there are fifty-percent positions and so on, you should think about that. Then I decided if there's a chance, why not? I can always go back to school. (Andreas, Germany)

Again, we see the interaction between self-efficacy, outcome expectations and career interests, goals and actions. As found by Dodds (2005), the relationships many of our participants developed with mentors resulted in exposure to professional opportunities, advice on how best to navigate career decisions and, as will be discussed in the next section, significant professional learning.

The mentoring relationships enjoyed by participants were largely informal and some had multiple mentors throughout their careers. It is notable that not all participants had mentors. Andreas (Germany), for example, comparing his journey with that of a colleague, commented:

I wouldn't say that I had a mentor the whole time. It was more like a sort of patchwork mentoring. It was something here and there . . . in comparison to [a colleague], he was more in the pathway of [his mentor] . . . like in the [wake] of a ship driving along. (Andreas, Germany)

A number of participants also experienced negative relationships which had direct impacts on their career decisions. One participant had his freedom and autonomy curtailed by a powerful colleague and went on to explain that this had the effect of motivating him to reach for a higher position where he would have more autonomy and not have this feeling of 'being an employee' again:

There was this colleague, and I never thought I should be grateful to him for that, who let me feel what it is to be an employee, to be told what to do . . . and there were two more colleagues that he told what to do and which literature to search for him and so on. And I realized that I suffered. I suffered from losing my independence that I had had. (Max, Switzerland)

There were also two other examples of participants who each found themselves working with people with whom they did not share professional values or outlooks, and this affected their career decisions. In one case, the participant decided to leave her position because she felt her work, and that of her mentor, was being undermined by a person in a senior role with responsibility for the programme. She did not foresee this situation improving and felt that she did not wish to remain in the position and witness the work she had done with her mentor being unravelled by someone who did not have the same professional outlook or perspective regarding what was best for the programme. In the other case, the participant found herself surrounded by colleagues with whom she did not agree on key professional concerns. However, she chose to stay until the situation improved. In the case of the first participant, she did not foresee a positive change in circumstance, which is why she was prompted to leave. The other participant stayed because she believed in the possibility of things improving. Outcome expectations were therefore key factors regarding these participants' career decisions in the context of unsupportive relationships.

These examples show that it is not as simple as supportive relationships leading to career development and unsupportive relationships being career limiting. Rather, as Lent et al. (1994) point out, contextual factors can moderate the relationship between interest and choice, and between choice and action.

Professional learning

According to Hodkinson 'learning, like career decision-making, is an integral part of living, not a separate process that takes place in a separate context' (Hodkinson, 2008: 11). Lent et al. (1994) emphasise the importance of learning experiences in interaction with personal and contextual factors and in guiding career development. Learning experiences are seen to shape outcome expectations and self-efficacy, which in turn affect interests, goals and actions. Whilst much of the professional learning of participants in this study took a self-directed form, many found that their relationships with mentors, colleagues and students were also formative and enhanced their professional learning and understanding of their roles:

The discussions [I have with my mentor], our impromptu discussions or talking over lunch or at conferences or just sitting in the office. Those things shaped how I feel about teaching and learning . . . I am like I am because of the things that he told me while I was studying . . . that shaped the whole way I think about being a teacher educator, you know, a professional in this field. (Josh, USA)

I read a lot. I picked people's brains a lot. I targeted people that I thought were really knowledgeable and supportive and I did have lots of philosophical discussions with a couple of people. You know, like, we did have quite a strong sort of group of I guess now we'd call them critical friends. And we did chew the fat a lot and challenge each other a lot. So a lot of [professional learning] I guess I did that way. (Olivia, New Zealand)

Considering the influence of relationships on professional learning, the data also uncovered the sometimes non-linear form professional learning can take in the context of professional journeys. Because of the somewhat ad hoc, unplanned way in which some participants' careers developed, they found that they had significant gaps in their professional learning and it was when they formed new relationships later in their careers that they were afforded the opportunity to become learners again and fill these gaps. For example, Sara, based in Ireland, described the impact on her professional learning when a new colleague joined her department:

What I've learned from her in relation to professionalism, how to conduct yourself, how not to conduct yourself, how to consider things, the sort of bigger role of being an academic. (Sara, Ireland)

Similarly, Cathy shared how forming relationships with new colleagues in the latter years of her career gave her the opportunity to become a learner and 'fumble around' in ways she had not had the opportunity earlier in her career:

I was seen to always be leading and guiding people... Because I hadn't been in a place that had [colleagues I could partner with] or I was always senior faculty... I didn't have the chance to grow up... And so since [I met two recent colleagues], they provided the same kind of personalities. I got to step back... I never had a chance to fumble around like a child does. (Cathy, Ireland)

Livingston et al. (2009) note that there has been a growing demand in recent decades for teacher educators to become research active. They root this increased demand partially in the external pressures brought to bear through institutional audit procedures that have come to pervade higher education institutions (particularly universities) in many countries. Several participants, when discussing the various roles they embodied as teacher educators, explained that as they progressed through their careers they gradually took on more administration and leadership positions and this often prevented them spending as much time as they would like conducting their own research and keeping up to date with scholarship. In these cases, many saw their relationships with graduate students as key to maintaining their connection to the scholarly aspect of their roles. As Karl (Germany) explained, he is 'being sort of kept up with research through the students that I am advising'.

Harrison and McKeon (2008) have identified conversations with colleagues as a key facilitator of professional learning. Such supportive conversations, and the relationships in which they are embedded, can be instrumental in helping teacher educators to construct their professional identities, allowing them to feel part of a professional community and laying the foundation for their professional learning (Izadina, 2014; Williams and Ritter, 2010).

Concluding comments

Hodkinson (2008) argues that career decision-making is never an exclusively individual act and that the actions of others have a significant influence. The theme of professional relationships was not one that was anticipated from the outset of this research, nor was it a direct focus of any of the interview questions. Rather, the importance of other people in the professional lives of teacher educators became apparent throughout the analysis process. From the perspective of SCCT (Lent et al., 1994), relationships with, and influences of, others mediated the links between participants' interests, choices and performance. Cycles of interest development, career choice and performance were strongly affected by the people with whom participants formed relationships throughout their careers. Positive or negative reinforcement was seen to encourage or discourage a particular career choice, depending on the outcomes participants anticipated and the value they placed on such outcomes.

Within the cases studied, the data uncovered the social dimension of the teacher education profession and, accepting that question-raising can be as important as answer-giving (Lawson, 1984, 2013), we now consider what this may mean for the preparation and support of teacher educators at all stages of their careers.

The first point we consider is the evident influence existing staff can have on who enters, and progresses within, the teacher education profession. Most participants were identified as potentially suiting the role by existing teacher education faculty and were encouraged by them to enter higher education. It may well be that such existing faculty encouraged many promising colleagues and only some remained in the profession. However, the mere fact of the existence of such encouragement and influence is rarely a focus in the literature. The social construction of research communities within physical education is discussed at length by Lawson (2009) and our findings suggest that some of the concepts to which he refers, such as networks and gatekeepers, have significant discursive value within teacher education more broadly.

Vroom argued that ‘people not only select occupations, they are selected for occupations’ (Vroom, 1964: 56). Reflecting on Vroom’s point, Lent et al. (1994) remind us that choice attainment depends in part on the extent to which an individual meets vocational requirements. This is particularly significant given the stress policy makers are increasingly placing on the importance of teacher educator recruitment and selection (European Commission, 2013, 2017). The vocational requirements of the teacher education profession, however, have not been well defined internationally and this has resulted in a certain ‘freedom of decision’ among those responsible for teacher education recruitment (Caena, 2013: 7). Because teacher educators are involved in the design and implementation of teacher education programmes, as well as the research on which these programmes are founded, the selection and support of such teacher educators is arguably one of the most important tasks existing staff can undertake and must require a number of related competencies worthy of exploration. Koster et al. (2005), in their professional profile of teacher educators, based on a Delphi study in the Netherlands, identified 27 tasks teacher educators ‘have to do’ and 29 competencies teacher educators ‘should possess’. It is notable that while the selection and support of future teachers featured in the profile, the selection and support of future teacher educators was not mentioned. While much emphasis is correctly placed on teacher educators recruiting and supporting prospective school teachers, their role in recruiting and supporting each other is also worth considering further.

The second point we consider is the support and advice teacher educators give to each other throughout their careers. Koster et al. did mention ‘giving guidance and support to, and receiving guidance and support from colleagues’ in their professional profile of teacher educators (Koster et al., 2005: 166). It was evident in our study that the influence of professional relationships was significant in shaping the identity, values and priorities of our participants, in addition to influencing the career decisions they made. Research by Richards et al. (2017) suggests that the importance of supportive relationships is also significant for today’s early-career teacher educators. In the context of the changing higher education landscape, with increasing expectation and pressure on early-career academics (Alfrey et al., 2017), the truism holds that history may not repeat but it rhymes. We suggest that professional relationships have always been, and will always be, influential in the professional development and learning of teacher educators. Acknowledging this and exploring its implications further may be helpful in supporting future teacher educators.

Given the support, advice, modelling and opportunities many of our participants enjoyed as a result of professional relationships fostered throughout their careers, we wonder how, if at all, both the formalisation of mentoring relationships at higher education institutions in many countries, and the increase in transparency and accountability for recruitment and promotion practices, have affected teacher educators’ sense of belonging, clarity of direction and purpose, suitability for their roles, and professional learning and development. It would be useful to explore further how professional relationships are affecting, and being affected by, careers in physical education

teacher education today. In addition, an exploration of the professional journeys of those who decided to move away from careers in teacher education may serve to further uncover the forces shaping the professional journeys of teacher educators. Just as teacher attrition research has yielded valuable insights into what might need improvement in the teaching profession and how teachers might best be supported in their roles, some work into teacher educator attrition may be warranted.

Declaration of Conflicting Interests

The authors declare no potential conflicts of interest to exist with respect to the research, authorship, and/or publication of this article.

Funding

This work was made possible through funding received from the Ministry of Education and Culture, Finland.

References

- Alfrey L, Enright E and Rynne SB (2017) Letters from early career academics: The physical education and sport pedagogy field of play. *Sport, Education & Society* 22(1): 5–21.
- Bandura A (1986) *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Ben-Peretz M, Kleeman S, Reichenberg R, et al. (2010) Educators of educators: Their goals, perceptions and practices. *Professional Development in Education* 36(1–2): 111–129.
- Bloch C (2012) *Passion and Paranoia: Emotions and the Culture of Emotion in Academia*. London: Routledge.
- Boyd P and Smith C (2016) The contemporary academic: Orientation towards research work and researcher identity of higher education lecturers in the health professions. *Studies in Higher Education* 41(4): 678–695.
- Bronkhorst LH, Meijer PC, Koster B, et al. (2011) Fostering meaning-oriented learning and deliberate practice in teacher education. *Teaching and Teacher Education* 27(1): 1120–1130.
- Caena F (2013) Education: Policy support for teacher educators – Perspectives on teacher educator policies in European countries: an overview. Working document. Retrieved from http://ec.europa.eu/education/school-education/doc/educator/caena_en.pdf
- Casey A and Fletcher T (2012) Trading places: From physical education teachers to teacher educators. *Journal of Teaching in Physical Education* 31(4): 362–380.
- Dodds P (2005) Chapter 4: PETE women's experiences of being mentored into postsecondary faculty positions. *Journal of Teaching in Physical Education* 24(4): 344–367.
- Elliott R and Timulak L (2005) Descriptive and interpretive approaches to qualitative research. In: Miles J and Gilbert P (eds) *A Handbook of Research Methods for Clinical and Health Psychology*. Oxford: Oxford University Press, pp. 147–159.
- Enright E, Alfrey L and Rynne SB (2017) Being and becoming an academic in the neoliberal university: A necessary conversation. *Sport, Education and Society* 22(1): 1–4.
- Erickson LB, Young JR and Pinneger S (2011) Teacher educator identity: Emerging understandings of person, positioning, roles, and collaborations. *Studying Teacher Education* 7(2): 105–107.
- European Commission (2013) *Supporting Teacher Educators for Better Learning Outcomes*. Strasbourg: European Commission.
- European Commission (2017) *Modernisation of higher education in Europe: Academic staff. Eurydice report*. Strasbourg: European Commission.
- Fletcher T and Casey A (2014) The challenges of models-based practice in physical education teacher education: A collaborative self-study. *Journal of Teaching in Physical Education* 33(3): 403–421.

- Gelfuso A (2017) Facilitating the development of preservice teachers' pedagogical content knowledge of literacy and agentic identities: Examining a teacher educator's intentional language choices during video-mediated reflection. *Teaching and Teacher Education* 66: 33–46.
- Griffiths V, Thompson S and Hryniewicz L (2014) Landmarks in the professional and academic development of mid-career teacher educators. *European Journal of Teacher Education* 37(1): 74–90.
- Harrison J and McKeon F (2008) The formal and situated learning of beginning teacher educators in England: Identifying characteristics for successful induction in the transition from workplace in schools to workplace in higher education. *European Journal of Teacher Education* 31(2): 151–168.
- Hodkinson P (2008) *Understanding career decision-making and progression: Careership revisited*. John Killeen Memorial Lecture, Woburn House, London, 16 October 2008. Available at: http://www.crac.org.uk/cms/files/upload/fifth_johnkilleenlecturenotes.pdf (accessed 28 July 2016).
- Hökkä P, Vähäsantanen K and Mahlakaarto S (2016) Teacher educators' collective professional agency and identity: Transforming marginality to strength. *Teaching and Teacher Education* 63: 36–46.
- Izadinia M (2014) Teacher educators' identity: A review of literature. *European Journal of Teacher Education* 37(4): 426–441.
- Kirk D (2014) Making a career in PESP in the corporatized university: Reflections on hegemony, resistance, collegiality and scholarship. *Sport, Education and Society* 19(3): 320–332.
- Kosnik C, Menna L, Dharamshi P, et al. (2013) A foot in many camps: Literacy teacher educators acquiring knowledge across many realms and juggling multiple identities. *Journal of Education for Teaching* 39(5): 523–540.
- Kosnik C, Miyata C, Cleovoulou Y, et al. (2015) The education of teacher educators. In: Falkenberg T (ed.) *Handbook of Canadian Research in Initial Teacher Education*. Ottawa: Canadian Association of Teacher Education. pp. 207–224.
- Koster B, Brekelmans M, Korthagen F, et al. (2005) Quality requirements for teacher educators. *Teaching and Teacher Education* 21(2): 157–176.
- Kovar SK (2004) The thirty-eighth Amy Morris Homans commemorative lecture 2004: A sense of connection and direction. *Quest* 56(3): 267–284.
- Lawson HA (1991) Future research on physical education teacher education professors. *Journal of Teaching in Physical Education* 10(3): 229–248.
- Lawson HA (1984) Problem-setting for physical education and sport. *Quest* 36(1): 48–60.
- Lawson HA (2009) Paradigms, exemplars and social change. *Sport, Education and Society* 14(1): 97–119.
- Lawson HA (2013) Appreciating complexity, endemic tensions and selectivity in proposals for program improvement and new institutional designs. *Sport, Education and Society* 18(1): 121–129.
- Lee HM and Curtner-Smith MD (2011) Impact of occupational socialization on the perspectives and practices of sport pedagogy doctoral students. *Journal of Teaching in Physical Education* 30(3): 296–313.
- Lent RW, Brown SD and Hackett G (1994) Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior* 45(1): 79–122.
- Lent RW, Brown SD and Hackett G (2000) Contextual supports and barriers to career choice. *Journal of Counselling Psychology* 47(1): 36–49.
- Lent RW, Brown SD and Hackett G (2002) Social cognitive career theory. In: Brown D and Associates (eds), *Career Choice and Development* (4th edition). San Francisco, CA: Jossey-Bass, pp. 255–231.
- Livingston K, McCall J and Morgado M (2009) Teacher educators as researchers. In: Swennen A and van der Klink M (eds) *Becoming a Teacher Educator: Theory and Practice for Teacher Educators*. Dordrecht: Springer, pp. 191–203.
- Loughran J and Hamilton ML (eds) (2016) *International Handbook of Teacher Education*, Volume 2. Amsterdam: Springer.
- MacPhail A (2011) Professional learning as a physical education teacher educator. *Physical Education and Sport Pedagogy* 16(4): 435–451.
- MacPhail A (2017) 'Physical education and sport pedagogy' and the three 'A's: Apprenticeship, academia and administration. *Sport, Education & Society* 22(5): 669–683.

- McEvoy E, MacPhail A and Heikinaro-Johansson P (2015) Physical education teacher educators: A 25-year scoping review of literature. *Teaching and Teacher Education* 51: 162–181.
- Mayer D, Mitchell J, Santoro N, et al. (2011) Teacher educators and ‘accidental’ careers in academe: An Australian perspective. *Journal of Education for Teaching: International Research and Pedagogy* 37(3): 247–260.
- Montenegro Maggio H (2016) The professional path to become a teacher educator: The experience of Chilean teacher educators. *Professional Development in Education* 42(4): 527–546.
- Morberg A and Eisenschmidt E (2009) Second-phase induction for teacher educators: Challenges and possibilities. In: Swennen A and van der Klink M (eds) *Becoming a Teacher Educator: Theory and Practice for Teacher Educators*. Dordrecht: Springer, pp. 103–112.
- Patton MQ (2002) *Qualitative Research and Evaluation Methods* (3rd edition). London: Sage.
- Richards KA, McLoughlin GM, Shriver VN, et al. (2017) Understanding physical education doctoral students’ perspectives of socialization. *Journal of Teaching in Physical Education* 36(4): 510–520.
- Rubin HJ and Rubin IS (1995) *Qualitative Interviewing: The Art of Hearing Data*. London: Sage.
- Russell T and Loughran J (2010) Probing the depths of a teacher educator’s work. *Studying Teacher Education* 6(1): 1–2.
- Silverman D (2013) *Interpreting Qualitative Data* (4th edition). London: Sage.
- Smith B and McGannon KR (2017) Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology*. E-publication ahead of print 14 May. DOI: 10.1080/1750984X.2017.1317357.
- Swennen A and Bates T (2010) The professional development of teacher educators. *Professional Development in Education* 36(1/2): 1–7.
- Swennen A and van der Klink M (eds) (2009) *Becoming a Teacher Educator: Theory and Practice for Teacher Educators*. Amsterdam: Springer.
- Tannehill D (2005) Back to the future: We listened and we learned. *Quest* 57(3): 287–299.
- Teddlie C and Yu F (2007) Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research* 1(1): 77–100.
- Tryggvason M-T (2012) Perceptions of identity among Finnish university-based subject teacher educators. *European Journal of Teacher Education* 35(3): 289–303.
- van der Klink M, Kools Q, Avissar G, et al. (2017) Professional development of teacher educators: What do they do? Findings from an explorative international study. *Professional Development in Education* 43(2): 163–178.
- Vanassche E and Kelchtermans G (2014) Teacher educators’ professionalism in practice: Positioning theory and personal interpretative framework. *Teaching and Teacher Education* 44: 117–127.
- Vroom VH (1964) *Work and Motivation*. New York: Wiley.
- Williams J and Hayler M (2015) Professional learning through transitions and transformations: Teacher educators’ journeys of becoming. Amsterdam: Springer.
- Williams J and Ritter JK (2010) Constructing new professional identities through self-study: From teacher to teacher educator. *Professional Development in Education* 36(1–2): 77–92.

Author biographies

Eileen McEvoy is concluding her PhD at the Faculty of Sport and Health Sciences at the University of Jyväskylä, Finland.

Pilvikki Heikinaro-Johansson is Professor of Sport Pedagogy at the Faculty of Sport and Health Sciences at the University of Jyväskylä, Finland.

Ann MacPhail is Professor in Physical Education at the Department of Physical Education and Sport Sciences, University of Limerick, Ireland.

IV

RESEARCH LIVES OF PHYSICAL EDUCATION TEACHER EDUCATORS

by

McEvoy, E., MacPhail, A., & Heikinaro-Johansson, P. (2018)

Curriculum Studies in Health and Physical Education, 9(1), 90-103

Reproduced with kind permission by Taylor & Francis.



ISSN: 2574-2981 (Print) 2574-299X (Online) Journal homepage: <http://www.tandfonline.com/loi/rasp21>

Research lives of physical education teacher educators

Eileen McEvoy, Ann MacPhail & Pilvikki Heikinaro-Johansson

To cite this article: Eileen McEvoy, Ann MacPhail & Pilvikki Heikinaro-Johansson (2018) Research lives of physical education teacher educators, Curriculum Studies in Health and Physical Education, 9:1, 90-103, DOI: [10.1080/18377122.2017.1418180](https://doi.org/10.1080/18377122.2017.1418180)

To link to this article: <https://doi.org/10.1080/18377122.2017.1418180>



Published online: 23 Dec 2017.



Submit your article to this journal [↗](#)



Article views: 141



View related articles [↗](#)



View Crossmark data [↗](#)

McEvoy, E., MacPhail, A., & Heikinaro-Johansson, P. (2018). Research lives of physical education teacher educators. *Curriculum Studies in Health and Physical Education*, 9(1), 90-103. DOI: 10.1080/18377122.2017.1418180

Final accepted version

Abstract

This paper aims to provide insights into the research worlds of an international group of mid- and late-career physical education teacher educators. Specifically, it explores participants' motives for research engagement and choices, and investigates what challenges and facilitates their research efforts. Two rounds of individual in-depth semi-structured interviews were conducted with 14 physical education teacher educators across seven countries. Findings point to a distinction between research motives. Embarking on formal theses or specific funded projects was often motivated by practical and contextual drivers, such as job requirements or a wish for promotion, and was associated with feelings of frustration and stress. Motives for engaging in research in general, on the other hand, tended to be more personal or altruistic and elicited feelings such as enjoyment and passion. Time constraints, skill gaps and language barriers were all seen as challenges to research endeavours, while learning through doing, seeing and reading, and collaboration with others were seen as the main facilitators.

Introduction

The gradual embrace of the research aspect of the working lives of physical education teacher educators has been dated back to the 1960s and 1970s, during which time professors and graduates of physical education teacher education programmes in the US and their counterparts around the world began to carve out a place for research in their academic roles (Dodds, 2009; Lawson, 1990; Locke, 1984). The first large-scale study on the research work of physical education teacher educators, conducted by Metzler and Freedman (1985), revealed the following about US physical education teacher educators at the time: i) they published, on average, one peer-reviewed publication every four years; ii) they rarely subscribed to journals outside of the subject area of physical education; iii) just 9% had more than 10% of their work time allocated to research activities; and iv) 16% placed research in the top three ways in which they would like to spend their work hours, while 47% placed research in the top three ways in which they believed their institution would like them to spend their work hours. A subsequent US-Canadian qualitative study from the same era also found participants' role orientations to be at odds with institutionally-defined role expectations (Mitchell & Lawson, 1986).

Lawson (1991), setting out an agenda for further research on physical education teacher education professors, listed, among pertinent questions, a need to investigate their research motives and practices. Responding to Lawson's call, Mitchell conducted several studies on the research aspect of the physical education professoriate in the early 1990s. He first set out to trace the academic genealogy of the 'elders' of physical education teacher education – those who were major contributors to the *Journal of Teaching in Physical Education* in the 1980s and, as such, had a degree of control within the 'invisible networks of prestige' of the profession (1992a, p. 426). It was his contention that determining whose knowledge is considered valuable is key to understanding and exerting control over the evolution of a profession. He also explored the scholarly activities of physical education methods teacher

educators in Ohio (1992b), finding that while their attendance at conferences and professional meetings was relatively high, their levels of engagement with creating and sharing new knowledge was less promising. Returning to the most prolific publishers among the sample in his earlier study (1992a), Mitchell set out to determine the enablers and barriers to their scholarly work (Mitchell, 1997). Personal attributes and supportive colleagues and mentors were seen as key to their research achievements.

A review of literature mapping empirical research on physical education teacher educators from 1990 to 2014 indicated that the focused empirical exploration of the research lives of physical education teacher educators witnessed a long hiatus since Mitchell's work (McEvoy, MacPhail, & Heikinaro-Johansson, 2015)¹. Until the current decade, few papers have since contributed to the empirical research base focused on the research worlds of physical education teacher educators.

How research is situated in the lives of those at the beginning of physical education teacher education careers has received some recent attention. A special issue looking at physical education teacher education doctoral programmes in the US highlighted the need for doctoral students to engage early in the research process and gain skills which will allow them to cross disciplinary boundaries in their research work (van der Mars, 2011; Ward, Parker, Sutherland, & Sinclair, 2011). Focusing on doctoral students and early career academics in field of sport pedagogy in Australia and New Zealand, Stylianou, Enright, and Hogan (2017) found that much learning related to research skills often occurs through self-directed practice and that working in isolation is common, such that opportunities to network and form peer relationships beyond the field become important sources of support.

With regard to later-career physical education teacher educators, practitioner research has done much to inform our understandings of their relationships with research. The self-study of Tannehill, Parker, Tindall, Moody, and MacPhail (2015) stressed the importance of collaborative learning in the development of their research identities and practices. Further, Casey and Fletcher (2017) demonstrated the feelings of frustration that can arise when a physical education teacher educator's research interests do not align with the research topics deemed conducive to meeting institutional publication and funding expectations. Other studies have illustrated how the process of conducting research can impact upon the identity and understandings of physical education teacher educators (e.g., Bruce, 2013; Garbett & Ovens, 2012; Legge, 2014; Pearson, 2011; Webb & Scoular, 2011).

Focus of Paper

The purpose of this paper is to build on existing literature to provide insights into the research worlds of an international group of mid- and late-career physical education teacher educators. Specifically, the paper aims to explore participants' motives for engagement in research² and choice of research topic, and to discover what challenges and facilitates their research efforts.

Methods

Participant selection

¹ This literature review was limited to peer-reviewed research published in English

² While acknowledging the value of a broad view of scholarship, the form of research which is referred to in this paper constitutes that which Boyer (1990, p. 16) refers to as the 'scholarship of discovery' and the 'scholarship of integration', i.e. that which adds to and interprets new knowledge.

Using a combination of convenience and purposive sampling (Patton, 2002; Teddlie & Yu, 2007), with a view to including mid- and late-career teacher educators with considerable experience from which to draw in responding to interview questions, 14 participants were selected from among 53 attendees at an international research seminar which focused on physical education teacher education. The selection was made according to three criteria: (1) contributing to the education of secondary physical education teachers, (2) holding a senior position in a given faculty (at least senior lecturer or equivalent), and (3) having at least 10 years of professional experience in the field of physical education with at least five of those years being as a physical education teacher educator in higher education. All participants were based in universities and, at the time of initial interview, held the title of either senior lecturer, assistant professor or professor. It is acknowledged that these titles encompass different responsibilities in different countries but the data demonstrated that all participants had a wealth of relevant experience through which to inform the data. At the beginning of the data collection period, participants had an average of 20 years of experience as physical education teacher educators, ranging from 6 to 38 years. Participants included seven women and seven men, based in seven countries: Belgium, Finland, Germany, Ireland, New Zealand, Switzerland and the USA. Although this study is international in the sense that its participants are based in various countries, it is not a comparative study and the participants do not claim to represent the totality of views from their respective countries. Rather, they provide individual perspectives from a variety of contexts.

Data collection

Data collection involved two rounds of individual in-depth semi-structured interviews. One participant chose to provide responses to questions from the initial interview in written form, another did so for her follow-up interview. These written responses were added to the interview transcripts before analysis. Of the 26 interviews conducted orally, nine were conducted in person at a location convenient to the participant (e.g. in an office or a quiet location at a conference) and the remaining 17 took place via Skype. Interview durations averaged 85 minutes (an average of 68 minutes for the initial interviews and an average of 101 minutes for the follow-up interviews).

The initial interviews were exploratory, centring on gaining a general sense of participants' professional pathways, their views on their subject and their experiences as teacher educators. The follow-up interviews, which took place approximately one year later, tracked participants' professional journeys in more detail and included questions related to how and why they engaged in research throughout their careers and the place of research in their working lives. Following the initial interview, each participant also provided a copy of his/her curriculum vitae. This was useful both in confirming general details provided in the initial interview and as a prompt in examining professional journeys and research lives in more depth in the follow-up interview.

Data analysis

The overall data corpus for this research consisted of 36 hours and 51 minutes of audio recordings as well as the two interview responses submitted in written form. When all audios were transcribed, this represented 745 pages of data (299,533 words). Data analysis was conducted mainly by the first author. The second and third author acted as critical friends, encouraging reflexivity and challenging assumptions throughout the process. Acknowledging that it is not possible to fully access the social reality of another (Smith & McCannon, 2017), our intention was to analyse descriptively the collected data (Silverman, 2013) and gain an overall sense of participants' experiences of engaging with research.

The first phase of analysis involved immersion in the data. The audios were listened to a number of times to become familiar with the narratives shared by participants in a holistic manner. A brief one/two-page summary of the full narrative shared by each participant was also created to serve as an aid in retaining the whole picture of each participant as the data analysis continued. The second phase of analysis involved exporting the full data corpus to Excel where it was divided into meaning units, defined as ‘parts of the data that even if standing out of the context, would communicate sufficient information to provide a piece of meaning to the reader’ (Elliot & Timulak, 2005, p. 153). Meaning units were created by reading carefully through the data and as each new thought/piece of narrative was shared, a new unit was begun. In all, the data was divided into 2012 meaning units. The units were kept relatively large (approximately 150 words on average) so that the data did not become too fragmented and the clarity of the contextual meaning was retained. As each meaning unit was created, it was assigned to the ‘domain’ to which it pertained (Elliot & Timulak, 2005, p. 154). The next phase of analysis involved categorising the meaning units within each domain. 1073 meaning units related to the research lives of participants and were categorised in the ‘research’ domain, which constituted the dataset for this paper. Within each category, units were further coded through a constant comparison of meaning units until all the data were sorted (Rubin & Rubin, 1995). The final phase involved looking across categories to identify themes which were common and provided insight into the research lives of participants. Participant pseudonyms are used in the presentation of findings.

Findings and Discussion

Åkerlind (2008, p. 17) terms underlying feelings academics have about research ‘researcher affect’. The feelings our participants expressed when discussing the research aspect of their working lives included frustration, excitement, anger, confidence, pressure, interest, stress, invigoration, tiredness, being energised, regret, enjoyment, worry, motivation, nervousness, happiness, sadness, passion, fascination, satisfaction, pride and inspiration. This range of feelings reflected the motives, contexts, challenges and facilitators associated with participants’ engagement with research.

Our findings section attempts to provide some detail on the most salient parameters shaping the research lives of our participants. The first subsection considers the theme of participants’ research motives and choices, detailing why they conduct research and what influences their choice of topic and publication outlet. The next subsection focuses on the theme of research barriers, including an exploration of data regarding time constraints, perceived skills gaps and language barriers. The third subsection focuses on the theme of research facilitators, including the sub-themes of learning through doing, seeing and reading, and collaboration with others. Findings are discussed in the context of related literature.

Research motives and choices

Lawson (1990) and Mitchell (1997) list various motives physical education teacher educators have for conducting research, including (i) a desire to improve practice, (ii) extrinsic motives such as employment security, professional responsibility, economic gain, peer pressure, or status, and (iii) intrinsic motives such as enjoyment, curiosity, learning, personal clarification, a wish for better understanding of themselves or practices in the field, a desire for a more clearly defined academic identity, or to satisfy personal urges.

Among our participants, these motives were all evident to varying degrees. However, there was a distinction between motives for embarking on formal theses or specific funded projects and motives for engaging in research in general. When asked why she embarked on her

doctoral work, Jane (New Zealand) responded: ‘Because I had to . . . it’s a requirement of a university, basically, that to teach in it you should have a PhD’. When speaking about why she engages in research in general, however, her response was more reflective of her general passion for her work: ‘It’s all about understanding practice I guess, what we’re doing and why we’re doing it’. This example was representative of a trend across our participants. Their reasons for embarking on formal theses and some funded projects were often related to practical and contextual drivers, such as job requirements or a wish for promotion. Their interest in specific research topics and in the research process more generally tended to be characterised by more personal or altruistic motives such as a desire to improve practice, a desire to enhance personal learning, curiosity rooted in a practical experience or previous research finding, or enjoyment of the research process. Following Åkerlind (2008), we found that the underlying feelings participants held about research were strongly linked to their research motives. In discussing institutional pressures to publish and to establish themselves, feelings tended towards frustration and stress. On the other hand, when describing the research process and conducting research to impact on practice, positive feelings such as enjoyment and passion predominated.

The importance for the integrity, development and worth of research of pursuing questions that are both ‘important’ (that is, having utility for practice and/or understanding) and ‘good’ (that is, matching reality and being answerable) was highlighted by Locke (1984, p. 4) and has been reiterated through the years (e.g., Crum, 2001; O’Sullivan, 2007). However, as O’Sullivan (2007) points out, research choices are also often political ones. For example, funding is directed more towards some questions than others and the importance placed on impact factors can influence choice of where and how to share research. The range of research questions investigated by our participants over the years covered a broad spectrum. While all were practicing physical education teacher educators, for some their research was focused in areas other than school physical education or physical education teacher education, such as physical activity, health, and leisure. Motives for choice of research topic were also often split between extrinsic and intrinsic motives, as found by Casey and Fletcher (2017). This tension between the two was captured by Andreas when describing the effect of gaining more autonomy through gaining permanent status at his institution:

It was pretty good because I was able to focus on the research that I wanted to do, I wasn't afraid any more that I had only that non-permanent position . . . [it's] an opportunity where you can research what you want and not research what is strategic.

(Andreas, Germany)

When choosing where to publish research, participants were guided by two main motives: satisfying the common institutional desire for high impact factors and choosing outlets which would allow the research to be shared with the most appropriate audience. Further, it was reported by many that some topics (such as physical activity and health) often lend themselves to journals with higher impact factors, and projects with greater funding, than topics related to pedagogy and this can make research choices difficult. The resulting challenges for those trying to negotiate sometimes conflicting influences is well reflected in this thought shared by Elina:

I don't know if I can explain but [over the years I have been thinking] should I sell my soul to do something that I'm not so interested in but where I could establish my

name? I have had possibilities to be part of some big [national] projects where . . . they published a lot. And it has been my decision that no, it's not important to me.

(Elina, Finland)

Max, facing a similar dilemma, explained how he led his team strategically to position pedagogical research in a way acceptable to his institutional context:

In this medical faculty, we had to find our position or legitimate that we are part of that. And I couldn't do that anymore with publishing on values, on social learning and whatever. That didn't fit in this faculty . . . I didn't want to sacrifice the subject but I had to find, strategically, a way that we could still do that kind of research without getting complaints, 'why are you with this kind of research?' . . . We do research on physical education in the medical faculty and no one complains because it is wrapped in a whole concept [of physical activity and health].

(Max, Switzerland)

Within higher education, a number of global forces have directly impacted research activities at local level. Scott (2009) explains that globalisation, neo-liberalism and other forces have led to increased competition between higher education institutions with research performance being seen as key to their branding efforts. This has resulted in tighter control of research activities and a type of audit culture in which individual academics are often measured by the weight of their publication metrics (a situation evocatively represented by Sparkes, 2007). These local manifestations of global forces were also evident among our participants. They experienced divided motives for conducting research, resulting in conflicting underlying feelings. Brew and Lucas (2009) emphasise the need to gain a clearer understanding of how academics conceptualise research and how research fits within their broader academic roles. Among our participants, all enjoyed the research process and there were strong positive feelings about pursuing particular topics, especially those linked to enhancing practice. However, the institutional pressure felt by some to publish more often than they felt could be done with integrity and to pursue certain topics in certain ways irrespective of preference, although resisted by most, had a negative effect on the level of job satisfaction of many and created a mismatch between personal and institutional priorities.

Research barriers

Among the circumstances seen to obstruct their research endeavours, some participants listed an absence of a research team or network, the difficulty of trying to grapple with the volume of extant literature and pressure to do research at the expense of other aspects of their roles. The overall related sub-themes in the data were time constraints, perceived lack of skills, and language barriers.

Time

The main aspect of the research lives of participants which had a largely constraining effect on their research choices, and strongly impacted their underlying feelings, was time. Participants had many demands on their time due to balancing various other commitments related to teaching, administration and leadership. In keeping with the typical working hours experienced by academics across European countries (European Commission, 2017), this balancing of roles resulted in participants working an average of 55 hours per week. The

range of hours spanned 35 to 90 hours per week³, depending on the participant and the time of year. Because many were in senior administrative roles, other high-responsibility duties often overtook the time allocated for research resulting in this aspect of their roles often being described as ‘squeezed in’ or occurring outside of scheduled working hours. Feelings about allowing research work to encroach on free time differed. While Jenni (Finland) explained ‘I want to do some sport in my free time so I don’t think that researching, it’s not my hobby’, Sara (Ireland) shared that: ‘In the same way that people say they go for a four-hour cycle on a Saturday . . . I would quite happily sit in and work. So, I think that facilitates, I facilitate my research’. Andreas (Germany) described this aptly as ‘the never-ending story about work-life balance’.

This lack of adequate time within scheduled working hours to fulfil all requirements of the role also impacted upon the nature and experience of research activities undertaken, as the following quotes demonstrate:

I like to really get immersed in something. And so, when you’re jumping out of teaching and you’ve only got a couple of hours here or a couple of hours there to work on your research or your writing, it’s too haphazard for me. So, I think that’s one of the biggest barriers really to, particularly to writing and even to thinking. Having good quality time to actually think through things. And I think that’s probably my biggest barrier.

(Olivia, New Zealand)

When I have had the possibility to do just research, so then you get really into the research. But then the problem is really the time. So, when you can focus just a certain amount of time [on research], so, then, you also, perhaps, lose interest because you can’t get so deep into something.

(Elina, Finland)

Keeping up-to-date with research was largely done through communication with colleagues, attendance at conferences and reading the published literature. This latter avenue was also somewhat constrained by time, however. The issue of lack of time to read, expressed by many, was compounded by the rapidly rising number of publications. As Max (Switzerland) expressed: ‘the number of publications is rising in an extreme way and you can’t keep up with the publications’. Lars (Belgium) concurred, further explaining that limits on his time mean his choice of what to read is often dictated by what is most pressing in the moment, precluding the possibility of maintaining a general familiarity with the extant literature: ‘I very, very, very rarely have opportunities to say, “Okay, now I will stay in my office and read a paper”. It’s always, “Okay, I need to read a paper because I need this paper for this or for this”’.

The importance of time to allow teacher educators to engage with research in a considered way has also been noted elsewhere (Hökkä, Eteläpelto, & Rasku-Puttonen, 2012; Willemsse & Boei, 2013). As these researchers argue, if universities wish teacher educators to embrace the research aspect of their roles, to teach in a research-informed way, to follow worthwhile lines

³ One participant is semi-retired. The hours included in this calculation for him were the average hours he worked in his last position prior to retirement. Also, where participants gave a range of hours, the average was taken and included in this calculation, e.g. 40-50 hrs per week was included as 45 hrs.

of enquiry and to share their research internationally, they must provide adequate resources to allow them to effectively fulfil this and other aspects of their work.

Skill gaps

The organic, self-directed nature of their development as researchers did sometimes leave gaps in participants' research skills, which some acknowledged as a barrier. Max (Switzerland), for example, shared: 'I was never an expert in empirically-oriented research. But I always knew that I should be, you know? That always put me under pressure, but I couldn't do everything'. This and other similar reflections betrayed the sense that learning was an ongoing effort for participants and it was possible to be an expert in some aspects of their roles and a novice in others. The absence of certain skills was associated with feelings of inadequacy among some and it was not until later in their careers, when they had the opportunity to work in teams and came into contact with graduate students or younger colleagues, that their skills gaps were often filled, as will be detailed in the facilitators section.

Language

This challenge had two related aspects. One was centred on the fact that most high-impact journals are published in English, which requires those for whom English was not their first language to expend significant extra effort and time to translate concepts and findings accurately while meeting the same publication timelines and standards. Hanna, from Finland, explained how she learned to write research in English through reading exemplary papers: 'I'm reading and I'm reading . . . How do they say that? . . . I know some articles so, so well in this world . . . My first article took one week [to read]'.

The second aspect of the language barrier was the fact that much research published in languages other than English goes largely unnoticed by those who do not speak the given language(s). This results in research often being conducted and published without an awareness of pre-existing research on the same topic which could have either informed or negated the need for such research. Lars explained:

Sometimes some people say 'We did something', or I hear someone say 'This group did this'. And I think, 'Yes, we did that two years ago' . . . it's like a frustration, we did many things and these things are not known. Even though these studies were presented, for example, in the national professional journal, no-one knows it . . . It's a real criticism for us from France, French-speaking Belgium, from Portugal, from Spain and so on, from Germany; there are many, many good papers in these languages that are not used by the international network.

(Lars, Belgium)

Elina (Finland) suggested that 'the only way you can, I think, get your research to go further [is] you need to have international contacts, especially if you are non-native speakers'. Here, she suggested collaborating with other researchers internationally as a key enabler. As will be discussed in the next subsection, collaboration, both locally and beyond, was also seen as key to easing time pressures and filling identified skills gaps.

Research facilitators

Among the facilitators to their research endeavours, participants listed effective graduate programmes, guidance by mentors in early years, funding, the freedom that comes with being in a senior position in later years, and working in an environment where research is respected.

Personal characteristics such as a natural curiosity, being self-directed, a propensity for hard work and an openness to other ideas and to being challenged were also noted as facilitators. The most prevalent sub-themes under the facilitators theme were learning through doing, seeing and reading research, and collaboration with others.

Learning through doing, seeing and reading

Whether having graduated from a structured physical education teacher education doctoral programme or having been mentored through their doctoral studies or research projects in a more informal manner, participants in our study reported that most of the learning which shaped their evolution as researchers was focused on the actual 'doing' of research, as well as on being observant of others and on reading the work of others. As Jane (New Zealand) explained: 'There is nothing like actually doing the research yourself for understanding, as you will know, what you learn from going through that process, it's just huge, isn't it? Understanding the confusion, the trying to find the meaning of things.' Ian's reflection was also representative of this finding:

I think you practice it, you get thrown in. You start reading and, you know, some of it through coursework and some of it through independent study and sort of like keep digging around and being surrounded by colleagues, other doctoral students or other colleagues once you're out who have similar curiosities, they behave in certain ways that shows that they're successful, modelling.

(Ian, USA)

As Ian alluded to, reading the research of others was seen as a critical facilitator of learning. Sara (Ireland) described how she learned to become a researcher: 'reading and reading, not just reading about the methodology but reading about the enactment of it, so looking at studies of how people had done it'. Mikko (Finland), distinguished between skills he learned through courses, such as statistical analysis, and skills which were more self-taught, such as being a critical reader of research: 'Some skills you're learning as part of your studies and other skills you have to develop yourself'. The importance of reading and self-directed learning for the development of participants as researchers highlights the compounding effect of lack of time for research work, detailed earlier.

Collaboration

The most prevalent of the enablers mentioned was collaboration with others. In addition to an increase in competition, pressure and control in higher education, described by Scott (2009), there has been a parallel increase in research collaboration and co-operation between academics and institutions, both within and between countries (Brew & Lucas, 2009). Collaboration was discussed among our participants in terms of working with graduate students and other research team members, and collaborating with networks nationally and internationally. Josh (USA) was one participant who felt he had not yet had the opportunity to collaborate: 'I really missed out on being a collaborator . . . so, it's definitely an area that I think is missing from my professional career'. For other participants, collaborating through networks was seen as helpful for expanding thinking, keeping up to date and sharing research and ideas:

I think the principle of networking, communicating with colleagues at conferences and beyond, I think that the networking gets perhaps more influential as you build

your network . . . Then all of a sudden you have this little community that has shared interest, shared focus and can help each other build on what's already there.

(Ian, USA)

We have very good discussions with professors and colleagues who are doing research and we encourage each other to do [research] and to share opinions.

(Mikko, Finland)

As promoted elsewhere (Hökkä et al., 2012), collaborating in a research team was also seen as effective in allowing researchers to complement each other's skills and fill any identified gaps in experience or knowledge. Cathy explained:

I don't think it's that you have to have every skill yourself . . . I think at some point you have to dive in and it's a muddy messy murky piece, but you learn in the process of doing that and then you find people to help you. So the skills piece, I think and you've got to have some fundamental skills, you can't go in and not do anything. But then you bring on board these people you need.

(Cathy, Ireland)

As mentioned previously, research assistants (often graduate students) were particularly helpful in filling skills gaps, sharing the research workload and easing pressure rooted in time constraints. A number of participants, such as Max (Switzerland), expressed the positive effects of eventually being in a position to hire an assistant: 'I could read more literature, I had more time for that. I could deal a little bit with research methods . . . We had to share our competencies and so on. But I felt that I had more time.'

As participants progressed through their careers and became more involved in leadership and administration duties, it was their work with graduate students which often kept them involved and up to date with research. As Karl explained:

I started out with my own research . . . [then doing my own research] was going down [decreasing] and at the same time, being a teacher educator, applying this research, was going up [increasing] . . . And now of course, the research, it's not going down [decreasing] but it is being sort of kept up with research through the students that I am advising.

(Karl, Germany)

Collaboration allows teacher educators to build their skills, create a shared language and work towards common research agendas (Willemse & Boei, 2013). It has been found to be important for both the general professional development of teacher educators (Shagrir, 2017) and for the development of physical education teacher educators as researchers (Tannehill et al., 2015). Our data reinforced its consequence, particularly in responding to time, language and skill constraints experienced by participants.

Concluding Thoughts

In the early years of physical education teacher education, a mismatch was evident between the priorities of physical education teacher educators and those of their institutions with regard to the place of research in their roles (Goc Carp, Williamson, & Shifflett, 1996; Metzler & Freedman, 1985; Mitchell & Lawson, 1986; Williamson, 1990). For many of our

participants, a disconnect was also evident between their priorities and those of their institutions but, in this case, it was rooted more in which topics are covered by their research and how often and where research should be published. Participants attempted, as best they could, to reconcile often conflicting motives for conducting research.

A compounding issue was that of research work being conducted within an environment of time pressures which affected participants' ability to keep up with related literature, to give findings and concepts the thought and consideration they considered due to them and to engage in the kind of self-directed learning they found so important to their development as researchers. Working in research teams was seen as key to sharing the research workload, filling skills gaps and easing time pressures. The fact that graduate students were crucial members of such teams is encouraging given evidence from both our data and the literature (Stylianou et al., 2017) of how important experiential learning is for the professional learning of researchers at all career stages.

The difficulty shared by some participants due to the increasing necessity for research to be published in English is also a finding worthy of comment. Kirk (2010) has suggested that researchers should ensure they are informed by related research conducted in languages other than their own and that they could facilitate this by learning to read research papers in other languages. We contend that working, where possible, in multi-lingual teams would also allow for sharing of research findings and perspectives. Additionally, research syntheses that combine research from multiple linguistic traditions and can be shared with a broad audience would be helpful. International associations such as the International Association for Physical Education in Higher Education (AIESEP) and the Research in Sport Pedagogy Network of the European Education Research Association (EERA) are well placed to co-ordinate such multi-lingual research syntheses. The custom in some journals which requires abstracts to be published in multiple languages is another practice that journals in our field could consider adopting to increase the likelihood that researchers can at least be alerted to related research being conducted in another language.

While we have presented here a necessarily brief overview of the research motives, circumstances and feelings of a group of physical education teacher educators, we are conscious that this is a mere fraction of the data that would be needed to make any substantive conclusions regarding the research lives of this population and how their practices might be enhanced and supported. We suggest a need for more large-scale, international, quantitative research on the research endeavours of physical education teacher educators. A global longitudinal survey, for example, exploring such areas as rationales for research topic choice, enablers and barriers to enhanced research practices, and the nature of teacher educators' engagement with existing research would be helpful in gaining a broad picture of the levers influencing knowledge production and engagement with knowledge in our subject area.

We conclude by reiterating a call by O'Sullivan (2007) for conversations regarding the principles underpinning quality research in our field. It is our hope that the insights shared here regarding the realities of being researchers and physical education teacher educators may serve to inform such important conversations. The authenticity of such conversations may be heightened by taking account of differences in teacher educators' motives, contexts, work roles, levels of autonomy, felt institutional priorities, felt disciplinary priorities and underlying feelings about the research experience.

References

- Boyer, E. (1990). *Scholarship reconsidered: Priorities of the professoriate*. San Francisco, CA: Jossey-Bass
- Brew, A., & Lucas, L. (2009). Introduction: academic research and researchers. In A. Brew & L. Lucas (Eds.), *Academic research and researchers* (pp. 1-12). Berkshire, UK: McGraw-Hill.
- Bruce, J. (2013). Dancing on the edge: a self-study exploring postcritical possibilities in physical education. *Sport, Education and Society*, 18(6), 807-824.
- Casey, A., & Fletcher, T. (2017). Paying the piper: the costs and consequences of academic advancement. *Sport, Education and Society*, 22(1), 105-121.
- Crum, B. (2001). The “idola” of sport pedagogy researchers. *Quest*, 53(2), 184-191,
- Dodds, P. (2009). When tadpoles grew legs and began to walk upon the land: The earliest days of PETE doctoral programs and research. In L. D. Housner, M. W. Metzler, P. G. Schempp, & T. J. Templin (Eds.), *Historic traditions and future directions of research on teaching and teacher education in physical education* (pp. 303-314). Morgantown: Fitness Information Technology.
- European Commission. (2017). *Modernisation of higher education in Europe: Academic staff*. Eurydice report. Strasbourg: Author.
- Elliott, R., & Timulak, L. (2005). Descriptive and interpretive approaches to qualitative research. In J. Miles & P. Gilbert (Eds.), *A handbook of research methods for clinical and health psychology* (pp. 147-159). Oxford: Oxford University Press.
- Garbett, D., & Ovens, A. (2012). Being a teacher educator: exploring issues of authenticity and safety through self-study. *Australian Journal of Teacher Education*, 37(3), 44-56.
- Goc Karp, G., Williamson, K., & Shifflett, B. (1996). Physical education teacher educators' work roles in research and doctoral-granting institutions. *Journal of Teaching in Physical Education*, 15, 251-265.
- Hökkä, P., Eteläpelto, A., & Rasku-Puttonen, H. (2012). The professional agency of teacher educators amid academic discourses. *Journal of Education for Teaching: International Research and Pedagogy*, 38(1), 83-102.
- Kirk, D. (2010). Current status and future trends in research on physical education in Europe: Some critical issues for why research matters. Keynote Address to the 5th International Congress and XXVI National Conference of the INEFC, University of Barcelona, 4-6 February. Retrieved from <http://www.ub.edu/Vcongresinternacionaleduccionfisica/userfiles/file/ConferenciasFinal/Conferencia1.pdf>
- Lawson, H. A. (1990). Sport pedagogy research: From information gathering to useful knowledge. *Journal of Teaching in Physical Education*, 10(1), 1-20.
- Lawson, H. A. (1991). Future research on physical education teacher education professors. *Journal of Teaching in Physical Education*, 10, 229-248.

- Legge, M. F. (2014). Autoethnography and teacher education: snapshot stories of cultural encounter. *Australian Journal of Teacher Education*, 39(5), 117-134.
- Locke, L. F. (1984). Research on teaching teachers: Where are we now? *Journal of Teaching in Physical Education*, 2.
- McEvoy, E., MacPhail, A. Heikinaro-Johansson, P. (2015). Physical education teacher educators: A 25-year scoping review of literature. *Teaching and Teacher Education*, 51, 162-181.
- Metzler, M. W., & Freedman, M. S. (1985). Here's looking at you PETE: a profile of physical education teacher education faculty. *Journal of Teaching in Physical Education*, 4, 123-133.
- Mitchell, M. F. (1992a). A descriptive analysis and academic genealogy of major contributors to JTPE in the 1980s. *Journal of Teaching in Physical Education*, 11, 426-442.
- Mitchell, M. F. (1992b). Scholarly behaviors of physical education methods teacher educators in Ohio. *Journal of Teaching in Physical Education*, 11, 303-314.
- Mitchell, M. F. (1997). Productive physical education pedagogy scholars: why they do it and how. *Journal of Teaching in Physical Education*, 16, 278-299.
- Mitchell, M. F., & Lawson, H. A. (1986). Career paths and role orientations of professors of teacher education in physical education. In M. Pieron, & G. Graham (Eds.), *Sport pedagogy* (pp. 41-46). Champaign, IL: Human Kinetics.
- O'Sullivan, M. (2007). Research quality in physical education and sport pedagogy. *Sport, Education, and Society*, 12(3), 245-260.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). London: Sage.
- Pearson, J. (2011). Adapting the boundaries in primary physical education: an account of my learning, my educational influence and improved practice. *Educational Action Research*, 19(4), 503-515.
- Rubin, H. J., & Rubin, I. S. (1995). *Qualitative interviewing. The art of hearing data*. London: Sage.
- Scott, P. (2009). Foreword. In A. Brew & L. Lucas (Eds.), *Academic research and researchers* (pp. xiii-xviii). Berkshire, UK: McGraw-Hill.
- Shagrir, L. (2017). Teacher educators' professional development: Motivators and delayers. In B. Boyd, & A. Szplit (Eds.), *Teachers and teacher educators learning through inquiry: International perspectives* (pp. 159-180). Kielce: Wydawnictwo Attyka.
- Silverman, D. (2013). *Interpreting qualitative data* (4th ed.). London: Sage.
- Smith, B., & McGannon, K. R., (2017). Developing rigor in qualitative research: problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology*, doi: 10.1080/1750984X.2017.1317357
- Sparkes, A. C. (2007). Embodiment, academics, and the audit culture: a story seeking consideration. *Qualitative Research*, 7, 521-550.

- Stylianou, M., Enright, E., & Hogan, A. (2017). Learning to be researchers in physical education and sport pedagogy: the perspectives of doctoral students and early career researchers, *Sport, Education and Society*, 22(1), 122-139.
- Tannehill, D., Parker, M., Tindall, D., Moody, B., & MacPhail, A. (2015). Looking across and within: studying ourselves as teacher educators. *Asia-Pacific Journal of Health, Sport and Physical Education*, 6(3), 299–311.
- Teddle, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, 1(1), 77-100.
- Ward, P., Parker, M., Sutherland, S., & Sinclair, C. (2011). A critical examination of the curriculum of physical education teacher education doctoral programs. *Journal of Teaching in Physical Education*, 30, 145-156.
- Webb, L. A., & Scoular, T. (2011). Reflection on reflection on reflection: collaboration in action research. *Educational Action Research*, 19(4), 469-487.
- Willemsse, T. M., & Boei, F. (2013). Teacher educators' research practices: an explorative study of teacher educators' perceptions on research. *Journal of Education for Teaching: International Research and Pedagogy*, 39(4), 354-369.
- Williamson, K. M. (1990). Conflicting demands for physical education teacher educators: institutional rewards versus role expectations. *Physical Educator*, 47(1).
- van der Mars, H. (2011). Reflecting on the state of U.S. doctoral PETE programs . . . “Houston, we’ve had a problem”. *Journal of Teaching in Physical Education*, 30, 189-208.
- Åkerlind, G. S. (2008). An academic perspective on research and being a researcher: an integration of the literature. *Studies in Higher Education*, 33(1), 17-31.