Navigating Postprofessional Physical Therapist Education

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A thesis submitted to Bond University in fulfilment of the requirements for the degree of

Doctor of Philosophy

at

Bond University in August, 2017

Faculty of Health Sciences and Medicine

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DECLARATION BY AUTHOR

This thesis is submitted to Bond University in fulfilment of the requirements of the degree of Doctor of Philosophy (PhD). I certify that this document represents my own and original work. The conceptualization, development, design, ethics applications, participant recruitment, study implementation, interpretation of the statistical analysis and final write up of these research projects were my own work with the feedback of my committee members and content experts. There were small components of this research that students were involved in under my strict and direct supervision. Students were from the University of Vermont and part of an instructional class to learn basic research skills. Their contribution has been appropriately acknowledged. All workload involvement was scrutinized and approved by the principal supervisor. Learning to supervise research students was discussed with my supervisory team and considered to be an important aspect of my PhD training.

Contribution and acknowledgement of all involved in the work included in this document have been clearly stated. The content of this thesis document has not been submitted for the award of any other degree or diploma of a university or institution of higher learning.

Karen C. Westervelt
30th August 2017
DECLARATION OF AUTHOR CONTRIBUTION

All co-authors on the chapters/papers indicated below have approved these papers for inclusion in Karen Westervelt’s doctoral thesis.


Declaration: Westervelt was responsible for the design of the study, data collection, data analysis, writing, editing and submitting the abstract and poster. Dr. Hing, Dr. Crane, and Dr. Sibold, reviewed the design, data collection, analysis and progressive drafts of the manuscript and poster. Smith and Tanych assisted in the analysis, writing and poster design under the direct guidance of Westervelt.


Declaration: Westervelt was responsible for the design of the study, data collection, data analysis, writing, editing and submission of the manuscript. Dr. Hing, Dr. Crane, and Dr. Sibold, reviewed the design, data collection, analysis and progressive drafts of the manuscript.

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The opinions expressed in this study are those of the author and do not necessarily reflect those of Bond University.

The National Statement of Ethical Conduct in Human Research (developed jointly by the National Health and Medical Research Council, Australian Research Council and the Australian Vice Chancellors Committee) has been adhered to during the conduct of this research.
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LIST OF ABBREVIATIONS

ABPTRFE – American Board of Physical Therapy Residency and Fellowship Education

ABPTS – American Board of Physical Therapy Specialties

ACP – Australian College of Physiotherapists

APA – Australian Physiotherapy Association

AUS – Australia

CAPTE – Commission on Accreditation in Physical Therapy Education

DA – Direct Access

DPhty – Doctor of Physiotherapy

DPT – Doctor of Physical Therapy

EBP – Evidence Based Practice

ESP – Extended Scope of Practice

EU – European Union

GMAP – Geographic Map

IFOMPT – International Federation of Orthopaedic Manipulative Physical Therapists

IFSPT – International Federation of Sports Physical Therapists

ISO – International Organization for Standardization

NZ – New Zealand

PhD – Doctor of Philosophy

PI – Principal Investigator

PSFS – Patient-Specific Functional Scale

PT – Physical Therapist or physiotherapist

URL – Universal Resource Locator
US – United States
USA – United States of America
UVM – University of Vermont
WCPT – World Confederation of Physical Therapy
Physical therapist education around the globe varies but one aspect is consistent: the need for high quality postprofessional education (Kulig, 2014a; Therapy, 2011). Greater autonomy of the profession has transformed entry-level physical therapist education and fueled the demand for postprofessional education. Navigating the postprofessional system can be a challenge for physical therapists.

These challenges include;

- Great variation exists in entry-level physical therapy qualifications around the world.
- Postprofessional education options for physical therapists vary greatly from weekend courses, to residencies, to clinical specializations, to post graduate diplomas, to fellowships. A lot of variation and confusion exists as to what these programs entail and what is best for the physical therapist.
- Leaders in the profession are advocating for more postprofessional education programs especially University based programs, but little is known about what already exists and what are the specific needs for future programming.
- Physical therapists are required to work in an increasingly global environment. Finding ways to collaborate with our international education partners to prepare future physical therapy specialists to work in an increasingly global environment is important for the advancement of the profession.

In our increasingly global world brought together by ease of travel and communication, we realize that these challenges around postprofessional education are shared by physical therapists globally. The WCPT mission statement is to “unite the profession internationally” and to “facilitate communication and information exchange… among their members” (WCPT, 2013).
The issue of postprofessional education is more than just a local issue, it is a global issue and one that we should address through collaboration with our international education partners. International collaborations benefit the profession nationally and internationally (Holdsworth, Webster, & Rafferty, 2012). Preparing physical therapy specialists to work in an increasingly global environment is essential for the advancement of the profession. There is a paucity of research in this area; therefore, this PhD research is being undertaken to fulfill this need.
Research Aims

The aims of this doctoral research include:

1. To review and analyze current entry-level physical therapist education globally.
2. To review and compare current physical therapist postprofessional education in the USA and Australia.
3. To synthesize the needs for postprofessional physical therapist education in two different geographical regions of the world.
4. To establish and analyze a model international collaboration experience between two well regarded institutions with DPT programs.
5. To evaluate an innovative international advanced clinical decision making mentoring program for novice clinicians.
ABSTRACT

Postprofessional education for physical therapists (also known as physiotherapists) is vitally important. It enables the clinician to gain confidence and satisfaction at work, helps the profession obtain more autonomy with higher educated professionals, and allows for a high quality of care for the client. Despite the agreement that postprofessional education is necessary and important, many obstacles exist that limit access to high quality postprofessional education. Recent trends in Australia (AUS) and the United States of America (USA) are strikingly different and warrant a closer examination. AUS has seen a recent decline in academic postprofessional physical therapy programs, which needs to be better understood as it is detrimental to the profession. The USA has seen a recent surge in interest in residencies and fellowships which also must be examined, as the cost and location of many of these programs make them inaccessible to many. The authors believe that there is much to be learned from our colleagues in the opposite hemisphere. To our knowledge a thorough study and comparison of physical therapy postprofessional education in AUS and the USA has not been conducted.

The aim of this thesis was to examine and compare postprofessional physical therapy education in AUS and the USA, identify the barriers and benefits to postprofessional education today, and propose and test models of postprofessional education that can help advance postprofessional education internationally.

To begin, an in-depth review was conducted of physical therapy education around the globe. It was deemed important to understand current global entry-level programming before study of postprofessional programming could begin. Variations in duration of physical therapy educational programming, as well as number of programs in each country and region of the world, were demonstrated. Variation in number of physical therapy programs per million population was also demonstrated. Despite the variation, encouraging signs could be seen. For example, the World Confederation of Physical Therapist (WCPT) recommends all entry-level physical therapy programs involve four years of university-based education. Our research showed that this recommendation is being met in 64.2% of countries in the world. Striving towards standardization in entry-level education is important for the
profession internationally, and allows for the international study and comparison of postprofessional physical therapist education.

Understanding and centralizing information about entry-level education in the first study led to the second study, an in-depth review of postprofessional physical therapist education. This study narrowed the focus to AUS and the USA. Analysis of this data confirmed the general observation that academic postprofessional physical therapist education programs are on the decline in AUS; currently, they are only located in seven coastal cities, creating educational deserts for those located elsewhere. The USA data revealed that residencies and fellowships are on the rise, but, like AUS, there are also areas in the country that are without programs. Similarities in the two countries existed in regards to focus of areas of study, with interest being greatest in the Musculoskeletal and Sports specialty. However, both countries are perhaps missing an important population need by offering very few to no academic postprofessional programs in geriatrics. This in-depth comparison demonstrates the profound need for international collaboration. By learning from our international colleagues, we can help AUS restore postprofessional programming that is innovative and meets the needs of the professionals and the population, and can also help the USA learn a lesson in history from AUS. Current professionals in the USA who are seeking clinical specialization must get the greater recognition and compensation they need in order to maintain the profession’s forward momentum.

These first two studies provided the foundation, i.e. existing educational programming, upon which three action based projects could build. The third study involved researching the providers themselves. Ten years of alumni in the USA and seven years of alumni in AUS from two schools were surveyed. A striking number of similarities were found, despite the fact that participants were being sampled from opposite sides of the world. Ten percent of participants from both schools had already completed a formal postprofessional education program. There was interest in obtaining postprofessional education among most clinicians, with the greatest interest in those with two years or less of clinical practice. Interestingly, both groups were interested in attending their alma mater to gain this additional education; however, both groups wanted a hybrid teaching style and were interested in collaborating internationally for this educational training in order to gain access to colleagues and experts around the world. They specifically were seeking clinical
mentoring. Barriers were also very similar for both groups, with cost and access to quality programming being the top two limiting factors for physical therapists seeking additional education. These findings lead to the formation of the final two studies to examine innovative models of delivery of postprofessional education.

The fourth study was designed to examine a model of international collaboration in physical therapist education in order to better understand the effects on students and educators. A group of physical therapy students and professionals traveled from the University of Vermont to Bond University for a two-week international collaboration in manual physical therapy. Master classes, teaching labs, and social opportunities were held with the combined group. The themes that emerged from long answer survey questions and prompted journaling questions included experiencing the “other”, learning, and collaboration. The experience proved beneficial for the traveling students, the hosts, and the teaching faculty. The findings support this model of international collaboration in educational programming and show that benefits exist for all parties from collaborating internationally. Not surprisingly, cost was again determined to be a barrier for this model. Therefore, the final study was designed to address the need for postprofessional education that helps reduce the barriers of cost and access, both of which are known limitations of current models.

The final study in this thesis involved the design and implementation of an online international clinical mentoring program. The model was specifically designed based on the findings of the first four studies. Small groups of novice clinicians from the USA and AUS were paired with clinical experts for online clinical mentoring sessions, which revolved around cases brought to the group by each novice. The video conferencing system allowed for a guided discussion of each case study and provided the novice with the support needed to improve confidence and critical thinking, two critical features of professional growth that are essential to develop during the transition from student to independent, confident, and competent practitioner. Participants found that confidence and critical thinking improved through participation. In addition, the model provided easy access to clinical mentors and to peers at a similar stage of professional development. Participants expressed a great appreciation for the structured design of the model. The experts were also in support of this innovative design, and felt that it was a viable model that will fill a
real need within the profession for more accessible mentoring to support clinicians.

In conclusion, this thesis provides information about physical therapist entry level education and postprofessional education at the programmatic level and at the user level. It clearly identifies concerns and barriers to postprofessional education, and provides practical, useful solutions to issues of cost, accessibility, and the need for greater international collaboration.

Key words: Physiotherapist, postprofessional education, physical therapist, mentoring, confidence, critical thinking, international collaboration, globalization, accessibility, education
Chapter 1
Physical Therapist Education Around the Globe: A Need for Greater Understanding, Globalization, and Internationalization

Chapter 2
Physical Therapist Postprofessional Education in the United States and in Australia

Chapter 3
Postprofessional Physical Therapist Education: A Survey from Two Different Regions of the World

Chapter 4
International Collaboration in Manual Physical Therapy: An Educational Model

Chapter 5
An Online Model of International Clinical Mentoring for Novice Physical Therapists

Chapter 6
Discussion