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PERSPECTIVES OF PHYSIOTHERAPISTS' CONTINUING
EDUCATION INVOLVEMENT AND RESULTANT
DEVELOPMENT PROPOSALS

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The overall purpose of this study was to ascertain crucial elements of Physiotherapists' involvement in Continuing Education (CE) for prospective CE planning. Attainment of the main purpose was to be achieved through the development of a survey potentially adaptable with other CE participant groups. Additionally the study was also intended to gather subjects' suggestions for development proposals formulation.

This descriptive survey study employed both cross-sectional quantitative and qualitative data collection. Subject selection inclusion criteria were specific to public sector physiotherapists due to their availability in concentrations with public service providers throughout the targeted region. Altogether 140 physiotherapists were sent requests to participate in this study and a final total of 60 responses were obtained. Of the total subject count 46 participants were from the South-western region of Finland and 14 originated from the Satakunta region of Finland. Subjects ranged between 20 and 63 years of age thus giving viewpoints from both ends of physiotherapists' professional working life.

The results of this study demonstrated the survey tool design to be effective in obtaining details of participants' involvement in CE and suggestions for improvements. Of particular interest were three findings: The first pertained to the identification of generations' majorities in current working life specific to Generation X and Baby Boomers. Second was participants' strong interest in workplace tailored and prospective apprenticeship type CE opportunities. Third were subjects' desire to be active in and have a means of direct input into planning of CE topics and content. Even though this study was descriptive, correlations between variables were considered. The outcomes of which were not overly significant statistically, but did indicate beneficial matters of interest for CE planners' consideration regarding participants' Age, Experience, Education level and Contract type. In all, the aforementioned findings proved to be instrumental in formulating resultant development proposals for CE.

FYSIOTERAPEUTTIEN OSALLISTUMINEN TÄYDENNYSKOULUTUKSEEN JA SIIHEN LIITTYVÄT NÄKÖKULMAT SEKÄ KEHITTÄMISEHDOTUKSET

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Tutkimuksen tarkoituksena oli selvittää, mitkä tekijät vaikuttavat fysioterapeuttien täydennyskoulutukseen osallistumisaktiivisuuteen. Lisäksi tavoitteena oli luoda sähköinen kysely, jota voitaisiin käyttää laajemminkin täydennyskoulutustarpeiden kar-toittamisessa. Kyselyn avulla kerättiin tässä tutkimuksessa osallistujien ehdotuksia täydennyskoulutuksen sisällöiksi ja järjestämistavoiksi.

Tämä kuvaileva poikkileikkaus kyselytutkimus sisälsi sekä laadullisen että määrällisen tiedonkeruun. Tutkimuksen kohderyhmänä olivat terveyskeskuksissa ja sairaaloissa työskentelevät fysioterapeutit (N=140). Kysely lähetettiin 140 fysioterapeutille ja siihen vastasi yhteensä 60 henkilöä, joista 46 työskenteli Varsinais-Suomessa ja 14 Satakunnan alueella. Tutkimukseen osallistuvat fysioterapeutit olivat iältään 20-63-vuotiaita, mikä antaa mahdollisuuden tarkastella eri sukupolvien näkökulmia fysioterapeutin ammatillisessa työelämässä työskentelystä ja kehittymisestä.

Kehitetty sähköinen kysely osoittautui toimivaksi kerätessä tietoja täydennyskoulutukseen osallistumisesta, kiinnostuksesta ja kehittämisehdotuksista. Erityisen kiinnostaviksi tuloksiksi muodostui kolme asiaa: Ensinnäkin eri sukupolvien väliset eroavaisuudet työelämässä etenkin suurten ikäluokkien ja ns. sukupolvi X:n välillä. Toiseksi havaittiin osallistujien vahva kiinnostus työpaikalle räätälöityjä täydennyskoulutuskursseja kohtaan ja oppisopimuskoulutuksen mahdollistamiseen täydennyskoulutuksessa. Kolmanneksi fysioterapeutit halusivat aktiivisesti vaikuttaa täydennyskoulutuksessa käsiteltäviin aiheisiin ja sisältöihin. Vaikka tutkimus oli kuvaileva, tutkimuksessa tarkasteltiin myös eri muuttujien välisiä korrelaatiota. Tulokset eivät olleet tilastollisesti merkitseviä, mutta ne osoittavat kiinnostavia yhteyksiä osallistujien iän, kokemuksen, koulutustason ja työsopimuksen suhteen. Näiden havaintojen pohjalta voitiin laatia kehittämisehdotuksia täydennyskoulutuksen suunnittelun ja toteutuksen tueksi.

Change is like the waves of the ocean, perpetual.

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1 INTRODUCTION

There is a wave of change in store for Finnish Polytechnics/Universities of Applied Sciences (UAS) in the form of imminent Polytechnic Act restructuring which will affect not only structure, how monies are attained and distributed, but also in how admissions and departments are conducted and ultimately structured to best benefit society in the near future. In the autumn of 2011 a reform process programme was initiated by the Finnish government in an effort to derive a government proposal resulting in a fresh Polytechnics Act which is to become effective 1.1.2014 (Website of the Ministry of Education and Culture 2013f). As with almost all things in life change is often initiated by need.

A strong effector of continued development and education policy in Finland is the balance between population age and the available workforce, whereas at present the annual number of those leaving the workforce is greater than that of those entering (Website of the Ministry of Education and Culture 2013j). This knowledge acted as one of the catalysts for reform of the existing Polytechnics Act and will undoubtedly have a great bearing on the future operations of all departments within UAS. The role of the Continuing Education (CE) department places it in a greatly beneficial position to assist both polytechnics, polytechnic reform and ongoing decreases in the labour force in Finland for example through apprenticeship type programmes and close cooperative efforts with employers. Together they could formulate a means of expediting appropriately educated individuals, both national and non-national workers, into areas of working life where identified needs are greatest.

The main theme behind this study is one of assisting the development of CE at the UAS level in Finland. The importance of CE is emphasized particularly in health care, as treatment techniques change continually with medical science, life science, health science and technological advancements (Ministry of Social Affairs and Health 2004, 11). The Ministry of Social Affairs and Health (MASH) (2004, 12) also

states that CE recommendations are intended to benefit three areas; quality of patient care, development of health care services and the improvement of health care workers skills. These recommendations are also intended to guide CE planning, implementation, worker and workplace evaluation as well as regional and sub-regional co-operation.

Healthcare professionals in Finland are required by law to maintain and develop their professional skills (Ministry of Social Affairs and Health 2004, 11). Turku University of Applied Science (TUAS) like other UAS in Finland has its own CE department intended to assist health care institutions and individual health care professionals seeking CE opportunities. To keep up with the educational demands placed upon it by the Ministry of Education and Culture (OPM), MASH and its clients, TUAS CE department often makes use of developmental research and must also itself develop continuously in order to provide the best up-to-date and effective services possible, which are essential to train health care staff and maintain their work abilities (Turku University of Applied Sciences 2011, 18). It was with this knowledge in mind this study set out on behalf of the client (TUAS) to devise a versatile means of obtaining knowledge useful in the perpetual development and planning of CE at TUAS through the manufacture and testing of a questionnaire, which could ultimately be applied interchangeably with minor modification to potential client target groups of healthcare professionals. Of the allied health professionals to whom the CE department at TUAS caters, physiotherapists were chosen for initial development purposes.

2 THE FINNISH EDUCATION SYSTEM

2.1 Policy

Knowledge, education and culture makeup the foundation upon which the wellbeing of society in Finland is constructed (Website of the Ministry of Education and Culture 2013a). To protect these valuable assets education system policy is governed by legislation. Finnish education policy's main goal is to ensure all citizens equal access to provision of education opportunities without prejudice (Website of the Finnish National Board of Education 2011a).

The Finnish education system is subject to education policy which assures everyone basic educational rights and delineates that which is compulsory. In conjunction policy assigns municipalities the responsibility of making developmental education opportunities equally acceptable beyond the basic level, by ensuring the taking into account of individuals' special needs and financial situation, safeguarding that such does not become a factor which may hinder self-development. (Website of the Finnish National Board of Education 2011a.)

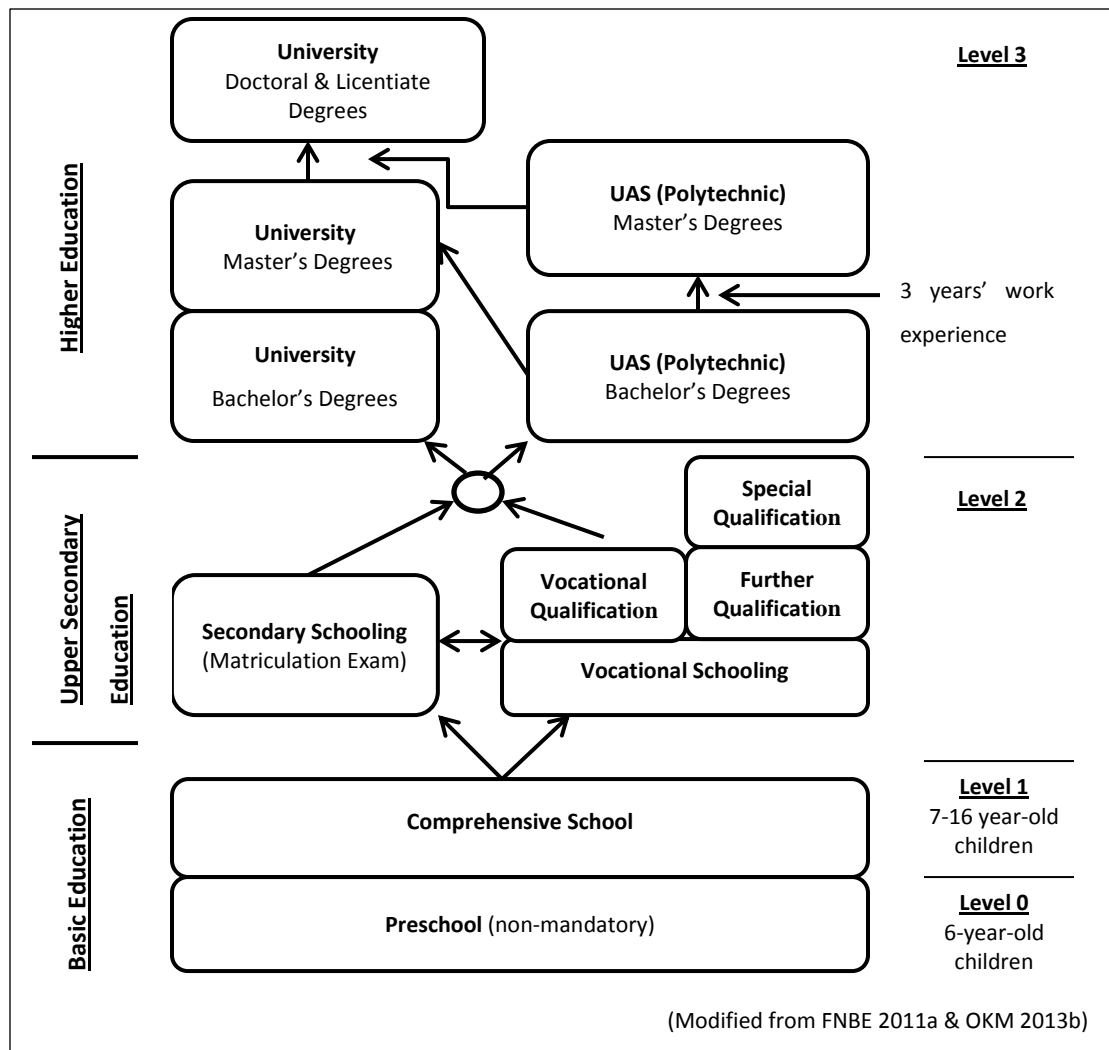
2.2 Structure

In Finland the education system (Figure 1.) is divided into three distinct levels which include; basic education, upper secondary education and higher education (Website of the Ministry of Education and Culture 2013a). Basic education also known as "Comprehensive school" constitutes the first nine years of education, which may be voluntarily preceded by one year of pre-primary education, often provided for by daycare facilities. Upper secondary education includes general upper secondary schooling leading to a matriculation exam and vocational institutions offering vocational training and vocational qualifications as well as further and specialist vocational qualifications. The third level deemed Higher education includes universities

offering Bachelor's, Master's and Doctoral degree opportunities and also consist of polytechnics, which are also known as Universities of Applied Sciences (UAS) offering Bachelor's and Master's degrees. (Website of the Ministry of Education and Culture 2013a; Website of the Ministry of Education and Culture 2013b; Website of the Finnish National Board of Education 2011a.)

Of the two types of institutions offering higher education in Finland there are likely more differences than similarities. Universities are mainly concerned with education and focus on conducting research of scientific and academic nature. Polytechnics however, base operational functions and education on the requirements and standards of working life. (Website of the Finnish National Board of Education 2011b.)

Figure 1. Structure of the Finnish Education System



2.3 Polytechnics / Universities of Applied Sciences

Polytechnics are regional higher education institutions which offer multiple areas of study, focus on promoting regional development and interaction with working life (Website of the Ministry of Education and Culture 2013c; Website of the Finnish National Board of Education 2010a). Admission requirements are general upper secondary education or vocational upper secondary schooling and training or an equivalent qualification obtained outside of Finland (Website of the Finnish National Board of Education 2010a). Degree programmes on offer range between 210 – 240 study credits in accordance with the European Credit Transfer and Accumulation System (ECTS) equating to fulltime study of three and a half to four years (Website of the Finnish National Board of Education 2010a).

As one of the two complementary sectors, polytechnics, the most recent addition to higher education in Finland, have the unique function of providing the labour market with appropriately trained professionals in accordance with demand. Polytechnics are known for stimulating regional advancement through research and development projects of which results are integrated into instruction. (Website of the Ministry of Education and Culture 2013c; Website of the Finnish National Board of Education 2010a.) In addition to providing educational opportunities for youth coming in from upper secondary education, higher education institutions also offer adult education. Adult higher education at the UAS level encompasses both degree programmes and Continuing Education (CE) (Turku University of Applied Sciences 2011, 6).

2.4 Finnish Adult Higher Education

Adult education broadly encompasses aspects of general, vocational and higher education constituting liberal adult studies and any education or training resulting in a degree or certificate, employee-development and such training financed by employers or labour market training intended for the unemployed (Ministry of Education

and Culture 2012, 9-10). Through adult education all levels of the Finnish education system are accessible to adults who do not have similar previous educational experiences (Website of the Ministry of Education and Culture 2013a).

Several purposes for adult education policy include the decrease of unemployment, prolongation of working life, and cultivation of a lifelong learning (LLL) culture through the provision of opportunities for all adults in the population (Website of the Ministry of Education and Culture 2013d). The flexibility of adult education design allowing studies to transpire alongside work has been made in great effort to accommodate this provision in benefit of participants (Turku University of Applied Sciences 2011, 6; Ministry of Education and Culture 2012,9).

There are around 800 educational institutions in Finland, which offer further and CE as part of adult education (Website of the Ministry of Education and Culture 2013d). Adult education is provided by polytechnics, through universities and in CE centres (Website of the Finnish National Board of Education 2010b).

At the polytechnic level the content of degree programmes on offer are the same for adult education as it is for young people admitted from upper secondary education. In addition to the degree programmes being offered are also open polytechnic education and CE opportunities, which include specialization courses and postgraduate degrees. Specialization courses are often wide-ranging constituting 30-60 ECTS study credits and are meant to enhance the initial degree programme. Whereas polytechnic post graduate degrees or Master's degree studies are of practical orientation, of a specific focus and intended for mature students of experience and are deemed equivalent to a university Master's degree in the same field. (Website of the Finnish National Board of Education 2010b.) A minimum of three years work experience and a Polytechnic degree or Bachelor's degree is required from anyone wishing to apply for Master's degree studies in a UAS (Website of the Finnish National Board of Education 2010a). Still, open education a fairly recent provisional development allowing the education of specific study units which make up parts of polytechnic degrees

is an alternative for anyone interested to participate (Website of the Finnish National Board of Education 2010b).

In higher education, parallel to polytechnics are universities having CE centres of their own, being nowadays well equipped to manage adult education needs in their own fashion and with some also offering Open University studies separate from CE. Although, through Open University it is not possible to study for a degree, but it is possible to complete modules and gather credits as a means of obtaining admission to degree studies. (Website of the Finnish National Board of Education 2010b.)

2.5 Lifelong Learning

In the literature Lifelong Learning (LLL) is often mentioned in conjunction with educational systems in their entirety as well as ongoing vocational and professional training, education and development. It is also often used as a broad blanket term, which explains educational pathways and endeavours in learning from their point of inception with children through maturation into adulthood, eventually winding down at point of retirement from the workforce (Ministry of Education 2002, 88; IOM 2010, 17). Literature signposts that LLL is the basis of CE, which makes up a significant portion of Continuing Professional Development (CPD). In note of this it should be illustrated that CPD is considered an incorporated component of LLL, not a product (Website of the World Confederation for Physical Therapy 2013; Website of the Chartered Society of Physiotherapy 2007). It should also be noted that in practice LLL is held as the ongoing professional and personal development learning process requiring individuals' participation in order to stay abreast with change (Website of the World Confederation for Physical Therapy 2013).

LLL as a principle is broad, used to guide educational policy and pertains to all educational levels deemed possible during a lifespan. In Finland this is the means by which the government and other groups involved in moulding education have at-

tempted to generate a learning promotion policy. The intent of the policy is to offer the possibility for growth of intellect, social skills, morals and appeal which encourage lifelong knowledge and information acquisition regardless of environmental variation. By involving working communities and non-government organizations to restructure operations in promotion of learning assists policy by encouraging personal development, continued social cohesion, productivity, innovation and ultimately democracy. (Ministry of Education 2002, 88.)

The purpose of the LLL principle is fundamental to many aspects of life in Finland and plays an utterly important role in maintaining the fabric of society, continued development and sustaining a viable workforce. Its primary purpose is to act as a founding principal for labor policy, which ensures continuous learning opportunities that are vital to providing quality rudimentary skills and training for youth entering the workforce and those already participating in the labour market (Ministry of Education 2002, 44). In addition there is also a second purpose to the policy giving guidelines as to how and for whom the policy is intended to be used. The secondary implication of LLL is to act as a policy line that affords all guaranteed access to new learning possibilities, employs any potentially beneficial environment and is regardless of age (Ministry of Education 2002, 44).

Since there are no dead-ends in the Finnish education system the term LLL holds true to its name. It is always possible to continue on in learning endeavors above the lower secondary or primary education levels via mainstream and adult education opportunities. The goals of the education policy for adults are multiple, and highly beneficial to society in that they are meant to provide, maintain and guarantee a capable workforce through the provision of educational opportunities for all adults, promote impartiality and ultimately result in strong social unity. These objectives are intended to support efforts to prolong working life, decrease unemployment, develop multiculturalism, stimulate productivity and act as a device for culturing a LLL environment. (Ministry of Education and Culture 2012, 9.)

Policy relating to the principle of LLL in Finland has been structured to ensure that each individual is afforded the skills need for learning as deemed essential throughout one's lifetime. In addition policy also safeguards the provision of continuing education opportunities designed to improve abilities and for the expansion of knowledge. The basic education policy and all other policies related to education and training incorporates these principals to ensure the provision of a rational means to attain a highly educated population and educational equity. (Website of the Ministry of Education and Culture 2013h.)

It is important here to point out that terminology associated with learning is often similar and can lead to miscomprehension of true implication and purpose. To help clarify meaning it is imperative to understand how learning is defined and categorized. According to the Institute of Medicine (IOM) (2010, 17) learning consists of many different stages which include the terms training, education and also professional development. Descriptions of each term are provided in Table 1. below to assist in comprehension and delineation of each meaning and how they relate to aspects relevant to this study which are encompassed by LLL.

Table 1. Three Important Terms of Learning

Training – pertains to efforts made in gaining consistent results as an outcome of process standardization.

Education – the process of learning to solve problems through application of solutions and adjust in unfamiliar situations.

Professional Development – excels beyond both training and education in that it teaches solutions application, problem identification and performance monitoring and involves areas like quality development, self-governed learning and system changes among others.

(IOM 2010, 17.)

In essence LLL is the founding principle upon which all organized learning in Finland is constructed and the guide by which practiced efforts of further learning are not only delineated and afforded, but also preserved. In this LLL pertains to not only

the education system as a whole from start to finish, everyone's rights to partake in the education system, but also the inclusion, support and propulsion of both CE and CPD.

2.6 Continuing Education

The term "Täydennyskoulutus" used by the Finnish Association of Physiotherapists (FAP) and UAS in Finland translates into English as Continuing Education (CE) and is also referred to as "Further Education" by MSAH. The intention of CE is to ensure competence thus supporting the ability of professionals to cope in work (Website of the Finnish Association of Physiotherapists 2004, 4). CE constitutes institutionally guided career related learning which transpires following achievement of one's license to practice as a professional up to the point of retirement (IOM 2010, 3). It is described as being a structured systematic instrument for improving, updating and maintaining professionals' abilities and knowledge through the implementation of need-specific training. Such educational opportunities may present as being either brief or long-term in nature and are intended to have an affirmative effect on efforts with clients and patients, both directly and indirectly. (Ministry of Social Affairs and Health 2004, 12; Website of the Finnish association of Physiotherapists 2004, 4; IOM 2010, 3.)

The ultimate expected results from the intended theoretical purpose of CE are up-to-date competent workers and overall improved care for all recipients (IOM 2010, 17). This being said, other elements must also be considered as the intent of ensuring competence through the employment of CE may be subject to an individual medical professional's own expertise development desires, current specialty, or their required functional capabilities within the organization for which they are employed and its own functional development needs (Website of the Finnish Association of Physiotherapists 2004, 4).

The IOM (2010, 3) describes CE in the United States for many medical professionals as often being subject to specifically mandated didactic intervals held within the confines of learning institutions, which is very much subject to the instructor's direction and where educational material offered often accords to schedules rather than relevance of participants' clinical education needs or desires. Whereas CE offered in Finland, which also represents professionals' institutionally guided learning, has been subject to ongoing developmental mandates set forth by the Ministry of Education. The planning process invites involvement of the client, thus allowing for expedient adaptation of material relevant to clinical settings, propagation of further expertise and multiform teaching which can venture outside conventional learning confines into the workplace (Website of the Turku University of Applied Sciences 2011b). and upholds and promotes the attributes associated with definitions of formal CPD. It is therefore reasonable to conclude that formal CPD and CE provided by UAS and other higher learning institutions offering CE in Finland are close if not equivalent representations of the same concept and that they may in fact be interchangeable. This exchange of terminology is supported by the findings of Mustajoki (2003) in that international literature previously written using the term CE has instead shifted continually towards favoring the term CPD. Physiotherapists are recommended by the FAP to participate in five to eight days of CE annually, assess, monitor and manage their own CE needs and maintain a professional portfolio in which CE participation is recorded and documents proving participation are kept (Website of the Finnish Association of Physiotherapists 2004, 5).

With the possibility of two terms representing a similar concept it is imperative to have an in-depth understanding of both constructs. Therefore the following section will delve into the meaning and purpose of CPD in an effort to reveal similarities and differences.

2.7 Continuing Professional Development

As demonstrated earlier LLL is the basis upon which CE and CPD are founded and are in actuality components. In that, CE typically represents institutionally guided learning and also in that CPD in general pertains to the combination of self-directed independent and institutionally guided learning.

The IOM (2010, 5) describes CPD, still an emerging concept in the USA, as a concept which envelopes CE yet goes beyond its narrow limitations by being learner driven thus making it possible for health professionals to customize the contents, setting and learning process according to need and endows skills such as problem identification and resolution application. Included in the meaning of CPD are a range of possible learning activities both formal and informal as well as work based learning (ER-WCPT 2010, 3). The design of CPD is holistic in its approach with intent to enhance health professionals' learning in school and work. Practitioners are empowered with control over their own learning made possible by its adaptability and flexibility to clinicians' specific needs. Education methods are based on multiple fields of evidence based research theory and subsequent findings while also employing as needed Information Technology (IT) to ensure greater effective learning opportunities. (IOM 2010, 5.) CPD is a continuous and systematic educational process which not only includes any activity aimed at ensuring ongoing competence and builds upon and supports one's initial professional education, but also extends one's overall effectiveness in conjunction with skills and knowledge acquisition required with changing responsibilities or new roles. (ER-WCPT 2010, 3-4; Giri, Frankel, Tulenko, Puckett, Bailey & Ross 2012, 1.)

Included in the scope of activities undertaken by healthcare workers that define CPD are all efforts to improve, renew maintain and deepen professional abilities, knowledge and attitudes as well as work based learning, whether formal or informal (ER-WCPT 2010, 3-4; Giri, Frankel, Tulenko, Puckett, Bailey & Ross 2012, 1). According to the IMO (2010, 17-18) the learning methods and theories used by CPD are

broader and more varied than those of CE. In addition CPD involves the use of more diverse learning formats and settings often outside the classroom in the workplace. CPD concentrates on content which is both practice-related and clinical and make use of methods like self-directed learning, systems and organizational factors (IOM 2010, 17). As mentioned earlier CPD is made up of two components, formal and informal learning. Formal learning transpires in conjunction with institutions providing planned CE programmes or other such structured educational environments within health facilities and may also occur as on-the-job instruction. Informal learning, although an essential part of CPD tends to have little structure and is often spontaneous, relying on situational need, availability of professional colleagues and often IT access. (Giri, Frankel, Tulenko, Puckett, Bailey & Ross 2012, 1.) Self-regulation is a key aspect of CPD and involves taking charge of one's own development needs, work and participation in learning and teaching activities. Individuals can best begin to recognize personal CPD needs by employing reflective practice which assists prioritization and informed decision making. (Scales 2011, 53-54.)

The IOM (2010, 18) describes CPD as being in a very good position to effect change due to its involvement with health care professionals when needs awareness is likely heightened. Of the 27 EU member states 17 have made CPD a requirement with some health professions and guidelines promoting participation have been put in place by a number of the other 10 states (Giri, Frankel, Tulenko, Puckett, Bailey & Ross 2012, 2). Healthcare systems have a vital reliance on professionals' involvement in CPD. The potential benefits of organized and continuous CPD opportunities are not only multiple for practitioners, but are mutually beneficial to the community as they are key contributors to outcomes of service effecting community health and patrons' experiences. (Giri, Frankel, Tulenko, Puckett, Bailey & Ross 2012, 5.) With this evidence it is not hard to see the relevant importance of educational opportunities for healthcare professionals and why keeping up-to-date and continual refinements are essential to one's effectiveness.

3 CONSTRUCTIVISM AS A PEDAGOGICAL APPROACH

3.1 Constructivism

The constructivist model is of great significance to TUAS as a learning organization. Its meaning necessitates explanation for enhanced comprehension of its functional incorporation into research and development (R&D), particularly as results are vital to many operations including CE.

Constructivism can be considered as an evolutionary advancement from cognitivism whereas concentration on information processing is instead substituted for the focus of how information is handled in the development of knowledge and learning (Jordan, Carlile & Stack 2008, 55). In this concept people actively participate in the generation of new knowledge and gain comprehension through processing newly acquired information with existent knowledge (Jordan, Carlile & Stack 2008, 55; Schweitzer & Stephenson 2008, 585). The model supports that learning transpires best with the use of “real-world” situations or contexts promoting acquisition and trial of concepts that support diversity and creativity. Interaction between peers is considered crucial as it promotes democratic decision making on a level playing field and identification of peers as possible resources. Ultimately participants’ activity encourages self-evaluation. (Schweitzer & Stephenson 2008, 585-586.) There are three forms of constructivism (Table 2.) as described by Jordan, Carlile & Stack (2008, 56, 59) which delineate individual, social and community.

Table 2. The three forms of constructivism

Trivial Constructivism: explains humans’ efforts at configuring personal understanding of the world around them through the formation of constructs also known as mental models.

Social Constructivism: explains the effect society has on how people comprehend and envision their experiences and how a social environment can affect context. Additionally it describes how society may through discussion lead to the negotiation of constructs comprehension and value.

Critical Constructivism: has particular bearing in frame of reference to the significance of community and adult education in placing emphasis on a heightened awareness of the cultural and social state in which they belong.

(Jordan, Carlile & Stack 2008, 56, 59).

The constructivist model is the founding idea connecting developmental functions in TUAS. It works as the fundamental principal behind efforts in R&D which lead to innovation and works to meld ongoing advancements of working life into functional learning. Use of constructivism in a learning organization environment such as TUAS assists research, which in turn leads to development and attainment of innovations applicable in both work life and education. (Salonen 2012, 22-23.) It is at present commonly acknowledged that people and collectives are not only molded by their environment and experiences, but that it is too moulded by people (Koltz & Lynch 2007, 3).

3.2 Learning Organizations

The TUAS is a learning organization based upon constructivism. What sets learning organizations apart from other organizations are the differences in not only operations and means of management, but in structuring, assignment of responsibility and vision. To better understand one must know what they are, how they conduct themselves, what they consist of and in this case how it is important to healthcare and education.

To know what something is one must appreciate how it is composed, its methods of operation and something of its past, according to Kondalkar (2009, 63) organizational learning has been credited with being the origin of the learning organization concept. In that, it can be any organization set up so as to be adept at generating, obtaining and completely altering knowledge such that it is resultant in the creation of new knowledge and behavioral adjustment which perpetuate competitiveness and prosperity. Some defining aspects of learning organizations include organizations that make changes in particular to practices, strategies and structures as well as processes generation and refinement in either assistance of or response to change (Kalamas & Kalamas 2004, 4). Learning organizations employ higher management tactics that implement new ideas and generate knowledge, broad-mindedness and systems think-

ing with environmental change being the stimulant for as needed ongoing re-evaluation of values and goals (Kondalkar 2009, 63). The authors Garvin, Edmonston & Gino (2008, 109) state that a learning organization is constituted by its employees abilities in knowledge generation, attainment and conveyance as well as their role in assisting development of tolerance, unrestricted communication employing systems and holistic thinking, which is resultant in the capability to adapt faster than the competition to environmental changes.

3.2.1 Essential Components

There are three essential components to learning organizations: an accommodating learning environment, structured learning processes and conventions as well as supportive leadership. These components are somewhat interdependent and supportive each of the other. (Garvin, Edmonston & Gino, 2008, 110,113.) The essential components (Table 3.) describe the particulars in further detail.

Table 3. Essential Components

Accommodating learning environment: provides psychological safety ensuring comfortable expression of thought, appreciation of differences and recognition of their value, receptiveness to new ideas encouraging venturing into what is unknown, unproven and allots time to reflect and review processes for deeper more productive thought

Structured learning processes and conventions: are reliant on information, its creation, accumulation, analysis, and transmission. The forms they take include research and development of services and products; trend awareness via gathering data on competitors, clients and technology; careful examination and clarification in problem identification and resolution; and enhancement of employees skills and abilities via ongoing training and education. To gain the greatest benefit from knowledge it must be structured and shared systematically.

Supportive leadership: has been shown to strongly affect organizational learning. The verbal engagement of leaders and their open-mindedness to varied options evokes in others an aspiration to learn, as well as a sense of value and belonging which encourages expression of ideas and solutions.

(Garvin, Edmonston & Gino 2008, 111-113.)

3.2.2 Method of Attainment

The creation of an environment supportive of organizational learning is key to prosperity as an organization's ability to manage and respond to change has become of utmost importance (Kalamas & Kalamas 2004, 4,5). In order for learning organizations to be successful individuals must learn to be creative instead of reactive, open to the ideas of others, be receptive of feed-back which helps determine priorities and achieve true self-awareness (Stinson, Pearson & Lucas 2006, 310). The organization needs to be skillful at solving problems systematically, testing and analysing new techniques and products, benefiting from what transpired in the past, determining benefit from other organizations best practices and be accomplished at expedient knowledge dissemination within their entire structure. A type of learning known as generative learning is considered the mark of an accomplished learning organization as it results in the stimulation of ingenuity and innovation as it accentuates R&D, analysis and solutions. (Klondalkar 2009, 63.) The means to achieving a learning organization requires setting and attainment of multiple particular goals.

Even though the list of goals is extensive, with guided adherence, a flexible approach, positive outlook and patience it often proves fruitful. Requirements for the genesis of such an environment necessitates; unified support of the same common vision, abolishment of stereotypical thinking, behaviour and treatment of people, abandonment of outdated methods, encouragement of the ongoing search for fresh and improved means encouraging innovation, as well as active participation of employees in CPD. It involves ensuring employees comprehend and support systems, their links and their interdependence, communication is multidirectional and unrestricted throughout the entire organization, and everything is based on teamwork and cooperation between teams. (Kalamas & Kalamas 2004, 169.) Personal agendas and interests take a back seat to the organization's vision and objectives attainment through cooperative efforts. Leaders' main concerns become that of ensuring that the working environment remains stimulating and favorable as well as that every single employee is efficacious. Encouragement of a work environment which furnishes

workers opportunity to facilitate learning and be optimal in what they do induces a sense of ownership generating vested interest in its overall continued prosperity. (Kalamas & Kalamas 2004, 169-170.) That which applies here relates to all organizations seeking to become learning organizations, including those in education and health care.

3.2.3 Importance to Health Care

The concept of a learning organization is as equally important in health care as it is in any other organization and to achieve such a status it must be continually developed. Cultivation of a learning culture in learning organizations takes commitment to LLL. Health care workers need to assign high value to learning, take responsibility for their learning needs and take advantage of any possible learning possibilities as presented. (Stinson, Pearson & Lucas 2006, 309-311.) As institutions of higher education and health systems undergo perpetual adjustments and advancements, their affiliated teams and employees have a necessity to be continually involved in LLL supported in part by CPD activities. The learning culture of educational institutions and associated health care environments must be developed with reflective input from the learners and their reflections need be incorporated into teaching as they are utterly essential to professional education and training as well as professional consort. (Stinson, Pearson & Lucas 2006, 309-310.)

3.3 Continuing Education Turku University of Applied Sciences

The functions of CE departments are vital to UAS operations, course contents, and professional, regional and working life development. The TUAS CE department constantly develops new products and services in accordance with the current working life situation (Website of the Turku University of Applied Sciences 2012a). Their aim is to keep abreast of working life's continued variation, resultant developmental and staff educational needs while simultaneously promoting the highly regarded goal

of regional development (Website of the Turku University of Applied Sciences 2011a; Website of the Turku University of Applied Sciences 2011b). The functional idea of the TUAS CE department is to act as the hub for business based and working life networking, which empowers clients continued development with effective influence being strongest in areas of community and business development as well as the extension of individuals expertise (Kopra 2004, 34-35).

It is the duty of the CE department to provide valued educational opportunities and training, as well as research and development services designed to assist organizations', individuals' and businesses' implementation and development supportive of improved expertise and business growth (Kopra 2004, 35). On offer are an assortment of CE courses arranged for professionals by each of the departments own areas or professional education (Website of the Turku University of Applied Sciences 2011b). These areas include "...Social Sciences, Business and Administration; Technology, Communication and Transport; Tourism, Catering and Hospitality Management; Natural Resources and the Environment, Natural Sciences; Arts and Media and Healthcare, Sports and Social Services" (Turku University of Applied Sciences 2011, 6).

TUAS arranges CE through multiple means ranging from seminars, specialization studies and short courses to theme days, in conjunction are also offered alternate forms of participation to afford participants continued engagement in full-time employment. (Turku University of Applied Sciences 2011, 6.) Included in these educational contributions are preparatory courses and seminars, which offer intensive deepening knowledge specific to relevant trends and working life's most pressing issues (Website of the Turku University of Applied Science 2013). Professionals from working life are implemented in planning and conducting seminars, short courses and specialization studies (Turku University of Applied Sciences 2011, 25).

Specialization study opportunities are available in various durations (Website of the Turku University of Applied Sciences 2012b). and contribute to standing experience

while affording professionals opportunities to delve into advanced sub-areas (Website of the Turku University of Applied Sciences 2011b). It is an investment in one's future, which improves and updates professionalism and work related competitive abilities (Website of the Turku University of Applied Sciences 2012a). making ongoing refreshment of professionals capabilities and advancement possible (Website of the Turku University of Applied Sciences 2012b).

Available through the CE department are also high quality diverse educational opportunities which can be tailor-made for business's specific needs (Website of the Turku University of Applied Sciences 2012a). In addition the department arranges working communities and companies customized development projects (Website of the Turku University of applied Sciences 2011b). Customized development programmes addressing businesses' needs are attained only through extensive cooperative efforts between both CE and business. Cooperative efforts often take the form of R&D projects as an integrated part of CE and the results of which are implemented into CE educational instruction or products in the form of educational services. (Turku University of Applied Sciences 2011, 25.)

Customers of TUAS CE are derived from three sectors constituted by the private sector at 45%, public sector at 45% and the third sector (associations, unions and clubs) at 10% (Turku University of Applied Sciences 2011, 25). They include specialists, executives, individual professionals, organizations and businesses (Kopra 2004, 35). Clients' extensive desire to improve existing skills and develop further expertise exhibits the importance of the CE services delivered by the TUAS demonstrated by the sheer number of annual participants. Every year TUAS CE capacitates about 5000 responsible employees seeking to improve their professional abilities and resultant effectiveness (Website of the Turku University of Applied Sciences 2011a).

The critical success factors of TUAS CE described by Kopra (2004, 36) include establishing a mutually active partnership with companies and organizations throughout the processes of design and implementation of CE endeavors, thus ensuring appropriate anticipation and analysis of customers' needs leading to suitably designed needs-based instruction, development proposals and research services.

4 STUDY AIMS AND OBJECTIVES

The purpose of this study was both descriptive and developmental in nature. The first objective of the study was to describe the participation of physiotherapists in Continuing Education (CE) and obtain their professional insights as to possible CE improvements needed so that the derived information would then be compiled for potential use in TUAS CE department's ongoing development and course content planning. The second objective was to develop a questionnaire format which will be of repeated future use in obtaining similar valuable information from other health care professional client groups and in monitoring possible impending trends in CE.

The questions to which this study sought answer were as follows:

1. How are physiotherapists engaging in CE?
2. What interests and opinions might physiotherapists have regarding CE?
3. What factors about CE offered has motivated physiotherapists participation?
4. What developmental suggestions for CE might these healthcare professionals have?

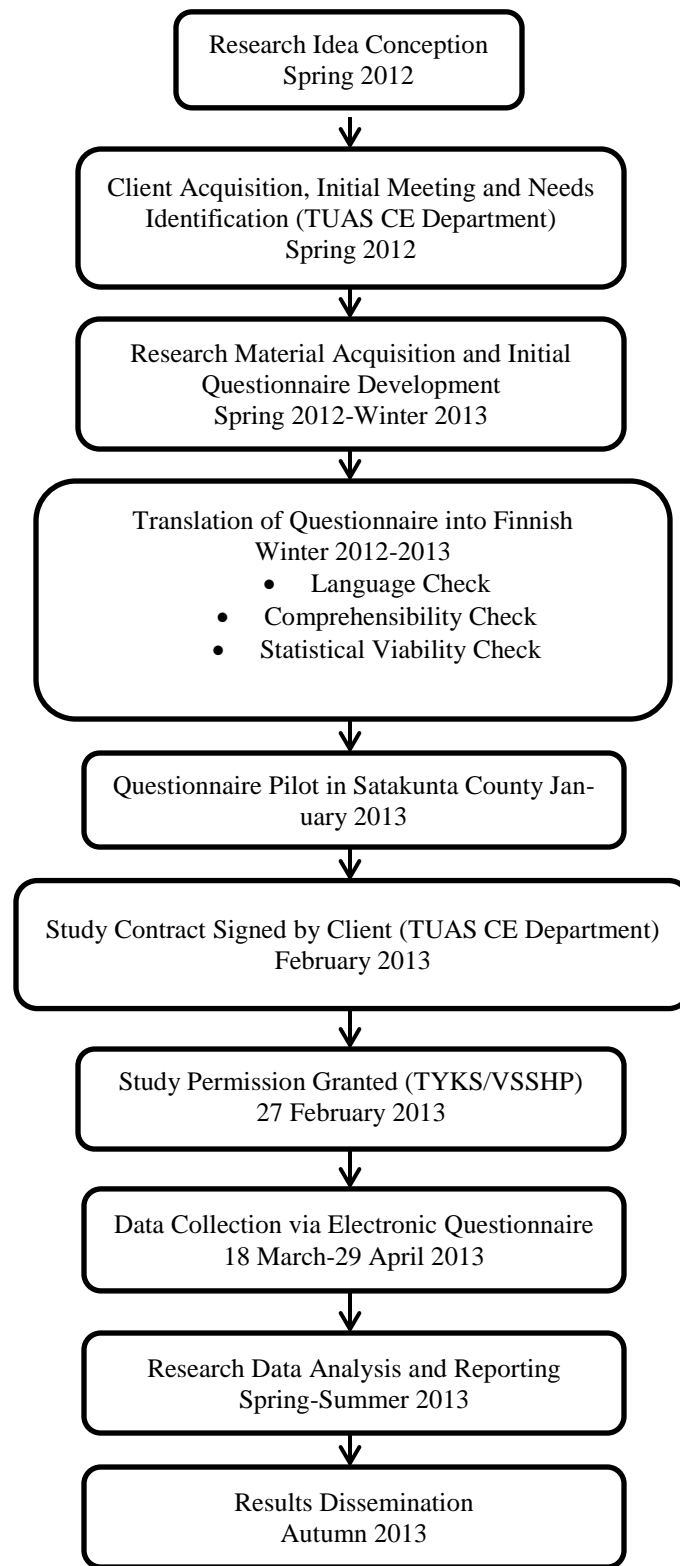
5 RESEARCH METHODOLOGY

5.1 Research Process

This research was a descriptive non-experimental cross-sectional study, which employed both quantitative and qualitative data collection. A cross-sectional study design examines specific subject variables obtained from a particular point in time (Burns & Grove 241, 2009). It is a means of collecting data describing the experiences of separate groups as it relates to a phenomenon (Parahoo 191, 2006). Combining methods is not only viewed as a suitable and desirable strategic means to generalizable results which are reliable and valid, but also as an inclusive approach to reveal the opinions of patients and clients (Parahoo 89, 2006).

Initial planning of the study design and possible means of data collection were initiated already prior to an introductory meeting with representatives of the client, TUAS CE department, in the spring of 2012. The meeting assisted in further refining design plans as discussions identified client's needs thus providing further focus to the study and a means to derive aims and objectives. Following questionnaire development, translation and pilot testing, an agreement to conduct the study on behalf of TUAS was approved in the winter of 2013.

Permission for this study was a prerequisite of one of the institutions requested to partake in this study and from which permission was obtained in February 2013. Data collection began soon after in March 2013 and ran for a total of six weeks and closed at the end of April 2013. Depletion of responses lead to the conclusion of response collection and initiated the results analysis phase of the study as depicted in Figure 2.

Figure 2. Research Process Timeline

5.2 Study Population

The targeted populations of this study included 69 public sector physiotherapists employed in Turku University Hospital (TYKS) and 56 physiotherapists from 12 healthcare centres in the South-western region of Finland. The physiotherapy departments of the included healthcare centres were all associated with an independently interconnected conglomerate group of physiotherapists known as Fysring. According to Burns & Groove (353-354, 2009) the criteria of including only physiotherapists employed in the public sector for reasons of ease of access to target population concentrations describes a sample of convenience. In addition Parahoo (266, 2006) explains that having made the sample criteria specific to one group also makes the sample purposive or judgemental.

The use of public sector workplaces provided access to population concentrations throughout the intended study region and already existing common communication possibilities via workplace email and professional networks. Both pools constituting a total potential study population of 125 individuals from which this study was to be derived. The pool held the potential to prospectively represent the diversity of the public sector physiotherapy population throughout the region of Southwest Finland, the main area in which the client operates. However, due to low response rates at the time of data collection modification to the study inclusion group was deemed necessary.

The final overall response rate from the potential study population yielded 46 responses (37%). Therefore, as only minor modifications to wording, the addition of a few common answer options and one Likert type scale question were added to the final version of the questionnaire, the questionnaire pilot groups' responses were amalgamated into the final results of the study to increase the response rate. Although, questionnaire pilot participants were not from the same region of Finland, they were otherwise appropriate to the inclusion criteria.

When the 14 participants' responses from the questionnaire pilot and the main study were combined the resultant population sample elevated significantly to $n=60$. The final answering rate was enhanced to 43% and the population sample pool ascended to $N=140$.

5.3 Data Collection

The data collection method employed in this study was a web-based electronic survey constructed by the author on Webropol 2.0. The service provided survey building, data collection, data storage and analysis possibilities. The questionnaire tool was constructed specifically for use in this study so as to derive data reflective of healthcare professional's participation in CE and obtain their opinions regarding CE issues in need of development. Pre implementation of data collection in this study the questionnaire was piloted in the Satakunta region of Finland with a small group of 15 physiotherapists having complementary inclusion criteria to that of the intended study population so as to refine the instrument and increase its reliability and validity (Burns & Groove 44, 2009). A very effective means of testing a questionnaire's quality is to pilot it (Parahoo 309, 2006).

Data collection was arranged in conjunction with the assistance of two head managers acting as liaisons between the researcher, institutions' department managers and study participants, one in TYKS and the other in the independent conglomerate group of physiotherapists known as Fysring. Each individual acted during the study to distribute the study invitations, instructions and reminders via workplace email to each of the institutions physiotherapy department managers. The managers then in turn distributed the relayed information and or requests to each physiotherapist's individual workplace email address. The study invitation letter (APPENDIX 1) and the questionnaire (APPENDIX 2) were made available for review in the appendix.

The study was opened to participants simultaneously in March 2013 and ran for six consecutive weeks. Upon completion, returned electronic survey forms were automatically directed straight to the researcher's own secure Webropol file to await analysis. Completion and submission of the questionnaire were taken as agreement to participate in the study. Initially the study was set to collect responses for a period of two weeks in which time many responses were obtained, but not sufficiently so as to satisfy the requirements of the study. Attempts to increase the number of responses obtained were employed through the provision of two participation extensions each two weeks in length. Response levels prompted action in the form of reminder requests being sent to the department managers relayed through head manager study liaisons on multiple occasions. Participation reminders including the electronic link to the survey were also distributed via email with each extension to all potential participants. A consecutive decline in participant numbers was noticed with each two week period up until the end of the sixth week, the end of April 2013 at which time it was decided to conclude the survey.

5.4 Data Collection Instrument

The questionnaire created for this study was comprised of structured and semi-structured questions containing; two-way, multiple-choice, two Likert type scales and also four open answer questions. Questionnaires in descriptive studies tend to produce data useful in comprehending the studied phenomena, but may also provide the means for devising concepts and hypotheses and may therefore contribute to knowledge production (Parahoo 283, 2006). The topic areas covered by the questionnaire included; Personal and work related demographics, CE participation, CE areas of interest, and Participants' CE opinions, Influential factors and Improvement proposals. Open-ended questions contained in the questionnaire were intended to derive CE development suggestions, CE opportunities factors which influenced participation and discover what acts as barriers and /or motivators to participation in CE.

Each question in each section was designed to derive information advantageous in CE planning.

In essence the questionnaire made use of both quantitative and qualitative methods of data collection. It is described by Parahoo (88-89, 2006) that the combination of methods has been successfully employed by many fields of discipline not only to analyze, but also describe a situation or phenomena and results to an extent which may not otherwise be possible with a single approach.

Piloting the questionnaire was conducted as a means to assist in refining the questionnaire before implementation with the intended sample population. Therefore resultant changes to the final questionnaire need be deliberated. The most significant modifications included removal of two questions, one to which the option for expression and intent was already allotted in another question, and the second provided respondents opportunity to comment on the questionnaire in development. No responses from either of the two aforementioned questions were included in the results of the study as they were deemed irrelevant to the purpose of the questionnaire.

Supplementary alterations to the study questionnaire also included minor changes to wording of some response options and in a few cases the addition of response options. Placement of some questions was also rearranged to accommodate question themes. Any response options which were derived from the questionnaire pilot and added to the final version of the questionnaire were accounted for and manually categorized when data were entered into the computer for results analysis. The inclusion of a question set focused on apprenticeship type continuing education constituted the greatest alteration made to the questionnaire and of which responses were collected only from respondents in the Southwestern area of Finland.

5.5 Ethical Considerations

All stages of this study employed proper research etiquette. This study adhered to being honest, accurate and diligent in recording, presenting and reporting of findings. Issues involving study reliability have been openly reported including discovery of any possible weaknesses. This study has complied with ethical scientific research guidelines and principles. (Website of the Finnish Advisory Board of Research Integrity 2012.)

Participation in the study was of minimal inconvenience to physiotherapists involved as participation was entirely voluntary. The research participants' anonymity was protected throughout the entire duration of the study as no personal details which may identify participants were collected by the questionnaire or other means. The results of the study have been presented in such a way so as not to reveal the identities of participants. All potential participants were informed about the specific details of the study in the study invitation letter. Participants also had the possibility to make queries with the researcher. Completion and submission of the questionnaire by the subjects was considered as provision of informed consent to participate in the study and for use of such information derived in reporting of the results. All potential participants reserved the right to withdraw from the study if so desired at any time during the study without consequence. The data has been safeguarded under careful protection and will be destroyed at the end of this study when no longer required. The study participants will also receive information about the study results and publications through their representative liaison. (Burns & Grove 189-205, 2009.)

The decision derived from the application for research permission was only applicable with VSSHP/TYKS. All other potential participating organizations (healthcare centres) were contacted individually and study permission requests were queried separately.

5.6 Statistical Methods

All submitted results were initially compiled on Webropol, which was also used to perform automated quantitative analyses of the descriptive data. As some questions were not preformatted for analyses in data groups the assistance of SPSS for Windows 2.0 programme was also employed. Resultant descriptive data were used to generate visually representative graphics from which study conclusions were supported. Correlations were not specifically sought out as the design of the study was to be descriptive and the extensive multiple response options made correlation analysis exhaustive. Of the correlations between variables which were discovered, the majority of circumstances demonstrated Pearson correlation coefficient values for $r < 0.50$ indicative that relationships between variables were fair to none in cases where probability was $p > 0.05$. The correlation coefficient r demonstrates the relationship between two variables where $+1$ or -1 is considered a perfect relationship and p describes the probability of a chance occurrence (Burns & Groove 478-481, 2009 & Parahoo 387-388, 2006).

Qualitative data were manually analyzed by means of content analysis and organization by themes. Initial steps taken in the process required interpretation of each individual responses meaning and organization into main categories. The second stage involved further division of main categories into related sub-categories. Finally in the third stage each individual response was interpreted into a corresponding single descriptive statement category and the representative tally was calculated for each symbolic statement. A similar three stage qualitative data analysis process is described by Parahoo (392-393, 2006) using basic, organizing and global themes.

6 RESULTS

6.1 Respondents' Demographics

Study participants were represented by both sexes, males constituting 13% and females making up the largest portion as 87% of respondents.

Study participants' grouped according to age appears in Figure 3. The youngest respondent was 23 years old and the eldest was 61 years of age. The average age of study participants was 42 years. Two age group majorities are noticeable with the greatest number of participants originating from the 50-59 years group at 35% and the second greatest majority from the group 30-39 years at 32%. The respondents' minority age group consisted of 60 + years at 3%.

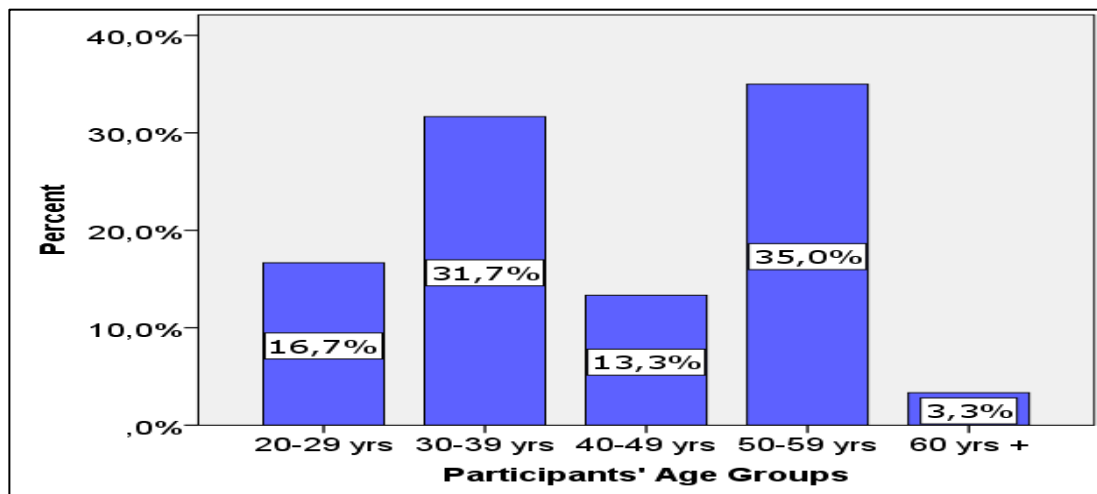


Figure 3. Study participants' age groups (n=60)

The level of study participants' completed professional education is represented in Figure 4. Respondents' levels of basic professional education were distributed 100% between Professional degree (vocational school), Post-secondary education (college diploma) and UAS Bachelor's degree. Completion of post basic professional education was achieved by 47% of respondents and was represented by Specialization, UAS Master's degree, University Bachelor's degree and University Master's degree.

Of the respondents selections 20% indicated having other professional education, of which most pertained to specialization studies. Specific responses for Other included: specialization courses which constituted 67% (Bobath 17%, Gender issues councillor 17% and Management Specialist qualifications 33%), Nursing school 17%, Sports Instructor 8% and Basic studies in sports medicine 8%.

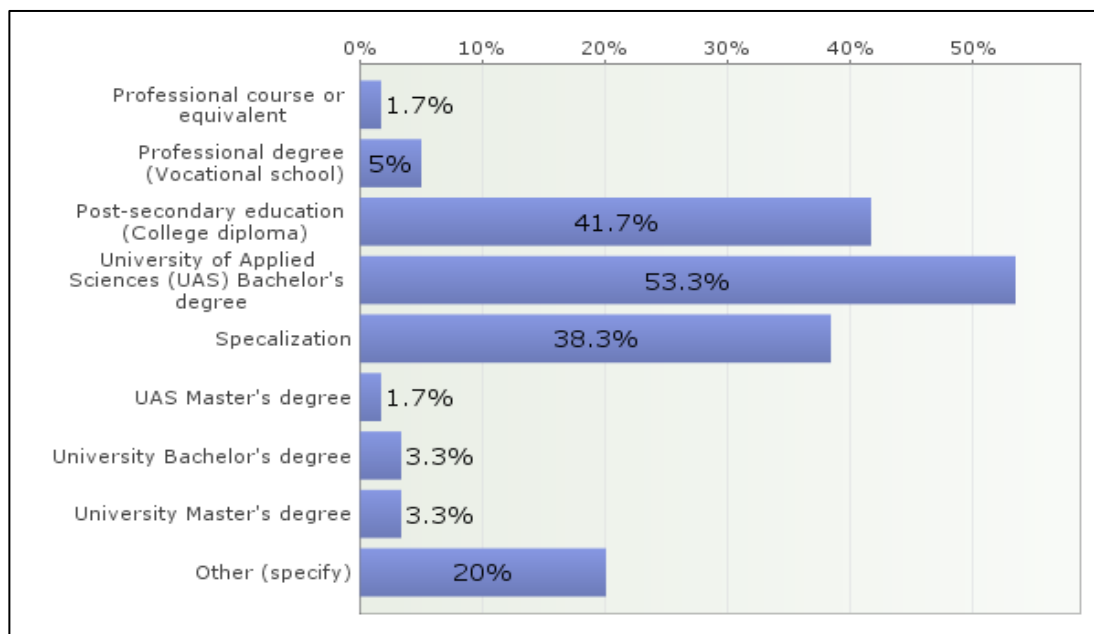


Figure 4. Study participants' completed levels of professional education (n=60)

All study participants' years of work experience as physiotherapists is displayed in Figure 5. The graph demonstrates a fairly consistent distribution between the volume of respondents and their age groupings. Although, notably higher volumes are seen in respondents with between one and 10 years' experience and notably low volumes of respondents were seen in groups with less than one year experience and those with over 36 years' experience.

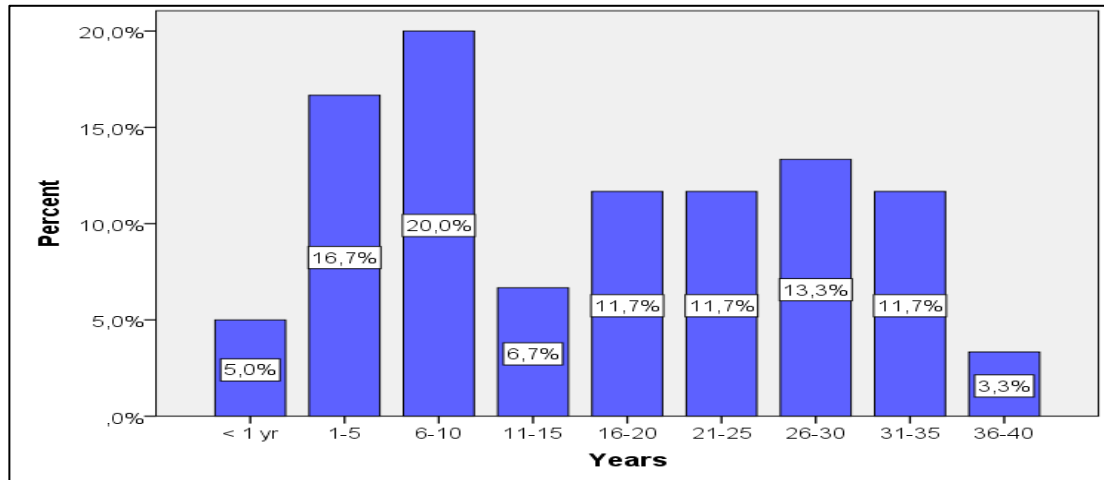


Figure 5. Study participants' grouped work experience in years (n=60)

Place of respondent's employment are depicted in Figure 6. Of the total study participants 100% worked in the mainstream public health sector with 3% also having involvement in the private sector.

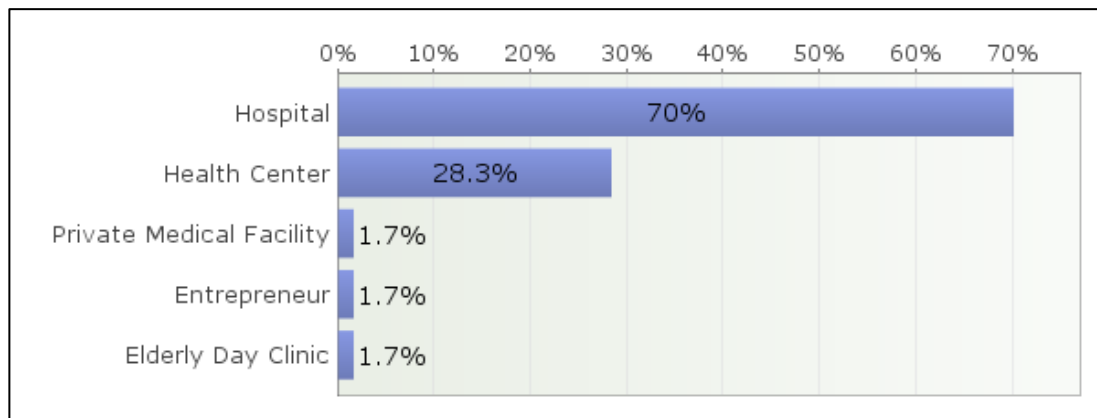


Figure 6. Study participant's place of employment (n=60)

All study participants indicated what type of employment contract (Figure 7.) they held with their current place of employment. Results demonstrate a majority of 72% to have had full-time work and that contract types were a combination of the available selections.

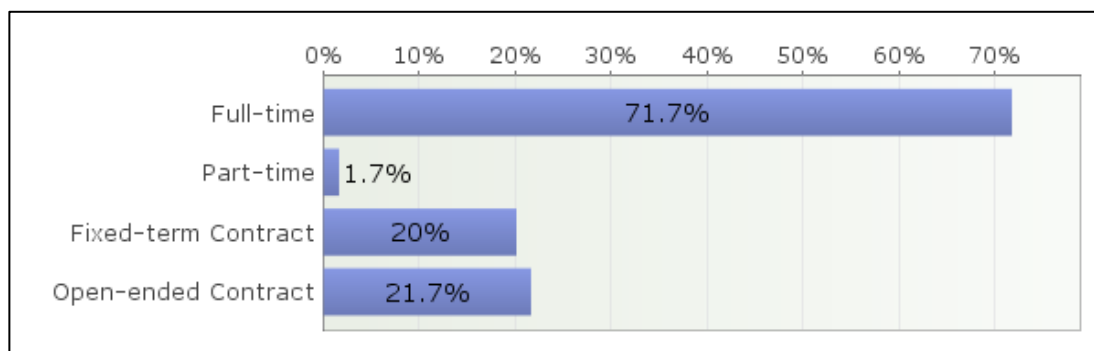


Figure 7. Study participants' current type of employment contract (n=60)

6.2 Respondents' Participation in Continuing Education

Non-formal forms of professional learning in which 97% (n=58) of respondents participated over the last 12 months are plotted in Figure 8. The most common form of non-formal professional learning was Discussions with colleagues at 95% and the least common form was Reflective diary writing at 9%. The category of Other was chosen by 5% of respondents however, only the response of meetings arranged by Fysring was considered appropriate.

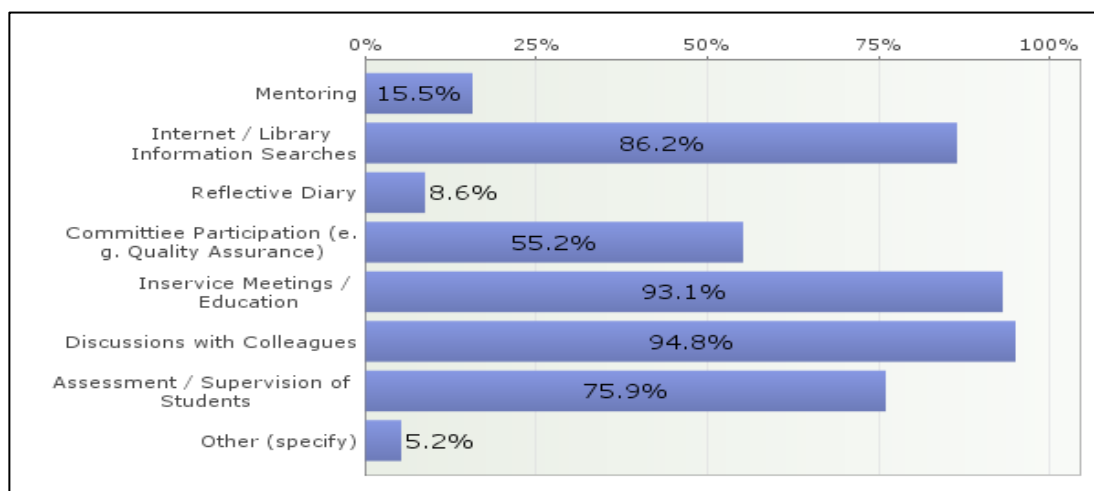


Figure 8. Study participants' participation in non-formal professional learning (n=58)

Responses demonstrating the volume of study participants who were involved in CE activities over the last 12 months depicted that only a small number of participants, a

little less than 1/5, had no involvement. Participants answering “no” were advanced by two questions.

A plethora of opportunities constituted as being within the realm of CE are currently available in Finland. Of these, the CE options within which study participants have been involved over the last 12 months are visualized in Figure 9. The two most common forms of participation in CE included Staff Training and Additional Professional Skills Training at 68% and 64% respectively. Areas of least participation included Management Specialist Courses, Certificate / Diploma Courses, University Arranged Seminars and UAS Workplace Tailored courses all at 2% respectively. The category of Other was chosen by 12% of respondents wherein four distinct topics constituted open responses (Apprenticeship type back care clinic education at 33%, Gender and sex related issues counselling education at 33%, employer arranged language course and union shop steward training at 17% and OMT schooling arranged by a conglomerate group of physiotherapists also at 17%.

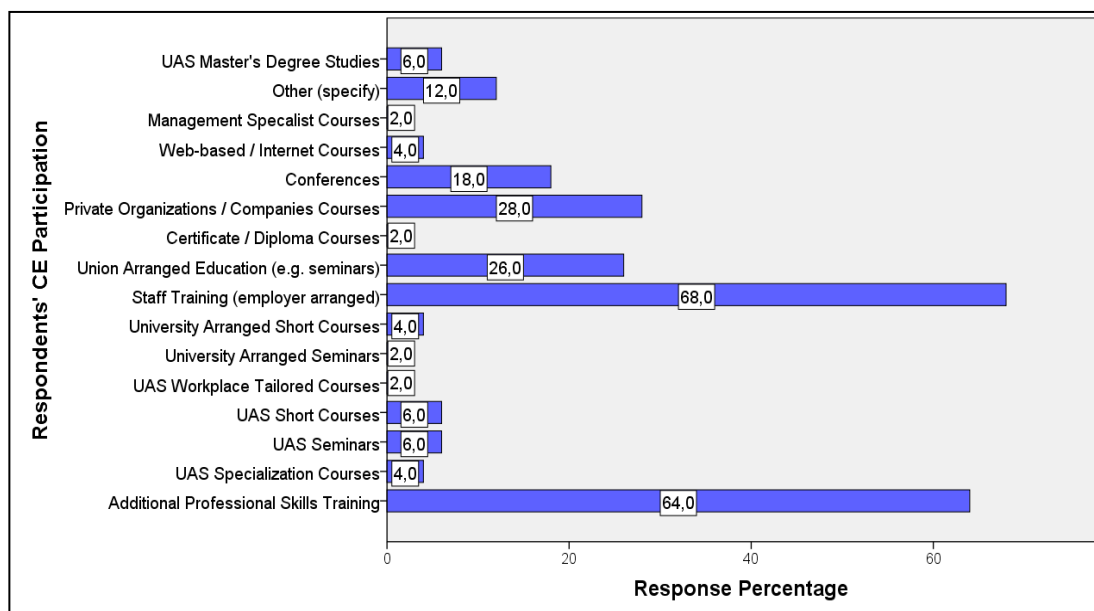


Figure 9. Participants' involvement in CE possibilities over last 12 months (n=50)

The first open-ended question in the questionnaire provided respondents each with the opportunity to describe three factors which motivated their participation in CE.

This resulted in a variety of answers to which some respondents only submitted a single response and others' individual responses included multiple answers resulting in a final tally of responses greater than that of participants. All obtained responses were organized into seven main categories, which were then further divided into sub-categories and plotted in Table 4. In all two responses were excluded due use of unknown abbreviations and incomprehensibility.

Table 4. Participants' motivational reasons for engaging in CE

Main Categories "reasons for participating in CE"	Sub-categories "reasons for participating in CE"	Respondents (n=50) n	Respondents %
Skills	Development	24	48
	Update	6	12
	Maintenance	5	10
	Acquisition	7	14
Knowledge	Development	6	12
	Update	20	40
	Maintenance	2	4
	Acquisition	28	56
Interest	Professional	1	2
	Personal	1	2
	Topic	7	14
Development	Professional	11	22
	Personal	5	10
	Workplace	2	4
	Physiotherapy	2	4
Techniques	Update	8	16
	Acquisition	6	12
Motivation in work	Increase	3	6
	Maintain	5	10
Other	Requirement	3	6
	Networking opportunities	3	6
	Break from work routine	2	4
	New perspectives obtainment	2	4
	Resultant financial benefit	1	2
	Need for new experiences	2	4
	Attainment of Career advancement opportunities	3	6

The 4 most common reasons given by respondents for participating in CE included reasons of Knowledge acquisition (56%), Skills development (48%), Knowledge update (40%) and Professional development (22%). Examples of participants' related text submissions are provided in italics.

Most answers given were short and concise.

“Need for knowledge”

“To develop professional skills”

“Special care situations require proven techniques”

However, some responses were more thought out and in-depth.

“For physiotherapists it is important to remain up-to-date and implement evidence based research. In hospitals many care regimes have become outdated and are not based on the outcomes of clinical research...”

“Patients deserve good and effective care, professional guidance and correct instructions.”

The second open-ended question allowed each subject the opportunity to voice three factors which have repressed their participation in CE. Responses to this question were abundant with some respondents listing multiple answers in each response opportunity thus increasing the ratio of answers given above that of responses allotted. The respondents' answers were first categorically arranged into five main issue related categories and one additional category for remaining issues which did not fit into any of the main categories. Further division of the main categories into sub-categories is visible in Table 5. Of all responses obtained three were not included in this tally as they were deemed inappropriate by being motivational in nature and were therefore not applicable.

Table 5. Factors acting as barriers to study participants' engagement in CE

Main categories “factors preventing participation in CE”	Sub-categories “factors preventing participation in CE”	Respondents (n=58) n	Respondents %
Finances	Money	8	14
	Total costs incurred	2	4
	Non-paid leave	4	7
	Limited employer CE support funds	38	66
	Price of CE opportunities	15	26
Time	Limited	17	29
	Busy schedule	4	7
Workplace	No staff cover	11	19
	Workload	8	14
	No leave for CE	8	14
	Employer delegation of CE opportunities	10	17
CE opportunities	Timing / Availability	2	4
	Selection	12	21
	Content	1	2
	Location	6	10
Personal issues	Family commitments	2	4
	Ability to cope	3	5
	Age	1	2
Other	Insufficient qualifications	1	2
	Bureaucracy	1	2
	Participation in CE possible only on weekends	1	2

The 4 most common factors inhibiting respondents for engagement in CE included financial issues with Limited employer CE support funding (66%) and the Price of CE opportunities (26%), Time limitations (29%), and CE opportunities selection (21%). Examples of participants' related text submissions are provided in italics below.

Most open answers given were short and succinct.

“Limited CE funding”

“Courses' price”

“Lack of time”

However, some responses were more thought out and in-depth.

“Insufficient CE support funding: in theory it’s possible to participate in one paid CE opportunity per year, in practice funds do not suffice for more expensive specialization courses...”

“It isn’t possible for all who desire to participate in free CE opportunities, because the workload couldn’t be completed appropriately and the upper echelons would not approve of such a situation, in which physiotherapy was not available”

“No temporary replacements arrangement: when I’m away someone else has to also do my work on top of their own or my work responsibilities becomes backlogged”

6.3 Interest in Continuing Education

This section of the questionnaire was intended to gather details of study participants’ current interest in CE. The first query assessed how many respondents would like to participate in CE in the near future. Respondents’ answers were overwhelmingly in favour of participation with only 5% to the contrary. Participants answering “no” were advanced by two questions.

The following (Figure 10.) demonstrates respondents’ interest levels in different CE possibilities. A maximum of 3/4 chose Additional professional skills training and the least chosen possibilities were Workshops and University long-term specialization courses both at 7%. Results demonstrated three distinct groupings. The most popular selections were Additional professional training and Staff training at 75% and 51% respectively. Secondly were Union arranged education and Private organizations’ courses respectively at 38% and 37%. The final grouping included UAS specialization courses 30%, UAS seminars, UAS short courses and UAS conferences each at

26%, and also University degree supplement courses at 25%. All remaining choices stayed below 16%. The option of Other was selected by 4% of participants.

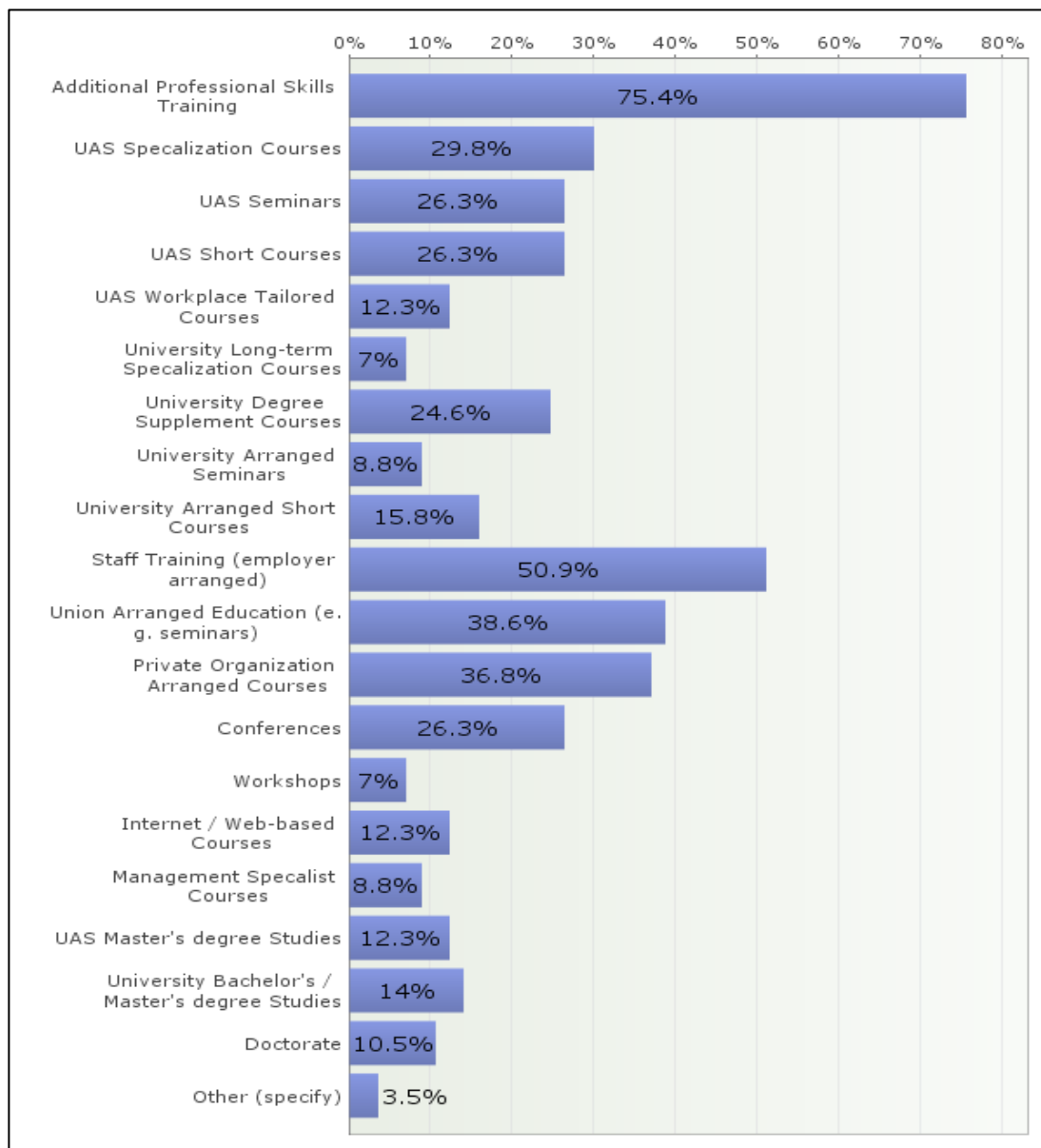


Figure 10. Participants' current CE possibilities interest (n=57)

Study participants' interests in CE according to educational/topic areas of focus are displayed in Figure 11. The area most chosen by respondents was Manual skills building at 56% and the least selected area was Respiratory health at 2%. Within the range of responses there are three prominent selection groupings. In descending or-

der of greatest selected the first group consisted of the two most common selections, which included Manual skills building at 56% and Musculoskeletal health at 47%. The next group of common selections consisted of Clinical assessment skills development 26%, Neurology 23% and Theoretical knowledge building at 21%. Lastly were Health promotion 19%, Pediatric care 16%, Pain management 14%, Exercise prescription 12% and Quality management at 11%. All remaining selections lingered under 10%. In this circumstance the option of Other was selected by 4% of participants in which respondents expressed interest in weight loss groups and assistive aids and device specific training.

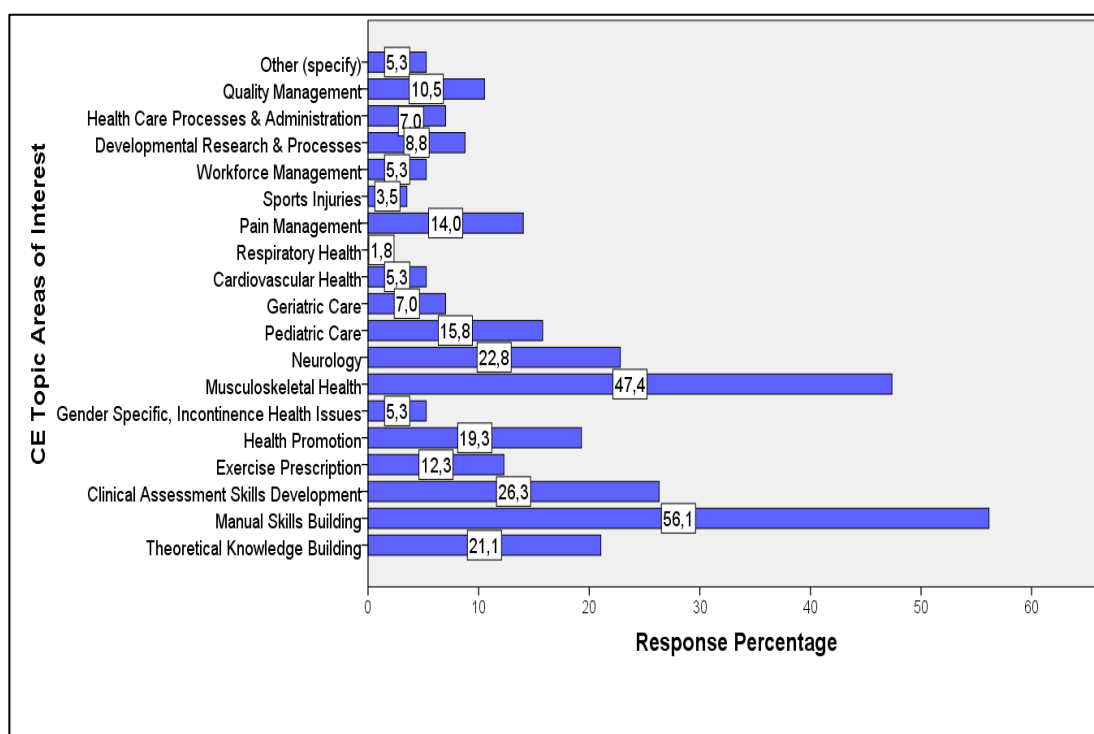


Figure 11. Participants' interest in educational topic areas of CE (n=57)

The modes through which study participants preferred to participate in CE opportunities is demonstrated in Figure 12. The mode selected by the greatest number of participants was Practical skills courses at 75% and the least preferred was Blended learning at work at 2%. Of the selections chosen there are three distinct answer groupings. The lead grouping consists of Practical skills courses 75% and Workplace

tailored courses 62%. Following this are Seminars / conferences 40% and Weekend courses / lectures 30%. The final group consists of Theoretical knowledge courses 22%, Evening courses / lectures 17% and Workshops 17%.

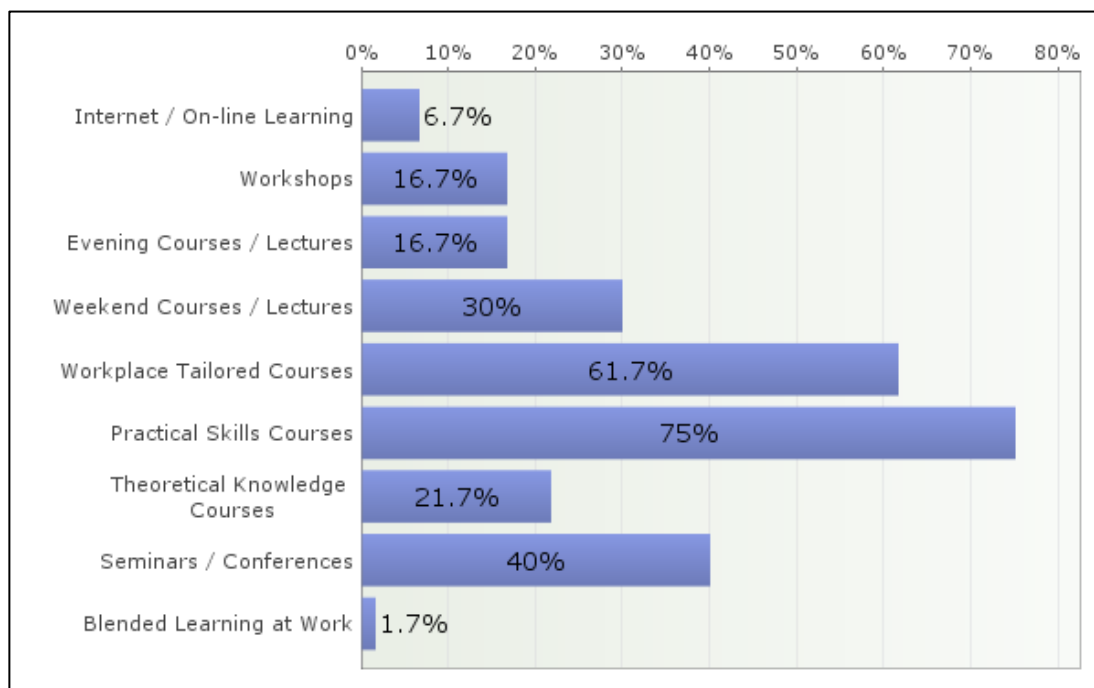


Figure 12. Participants' preferred modes of CE participation (n=60)

6.4 Participants CE opinions

This section of the questionnaire was used in obtaining study participants' opinions in regards to different aspects of CE. Aspects covered included CE teaching methods and two Likert type scale questions one regarding participants' opinions about involvement in CE and the other obtained professionals' opinions about the need for apprenticeship type CE programmes.

Teaching methods by which respondents feel they learn best are shown in Figure 13. The greatest number of respondents 51% chose Lectures and the three options least selected were Drama 2%, Merged learning 2%, and On-line / e-learning at 2%. Responses generated three noticeable groupings. The first group contained the answer

options of Lectures 51%, Seminars 40% and Guided instruction 37%. The second group consisted of Group work 29%, Demonstrative teaching 27%, Blended learning 25%, Project work 24% and PBL at 24%. The Final group enclosed Collaborative group work 22%, Presentations 20% and Independent study at 19%.

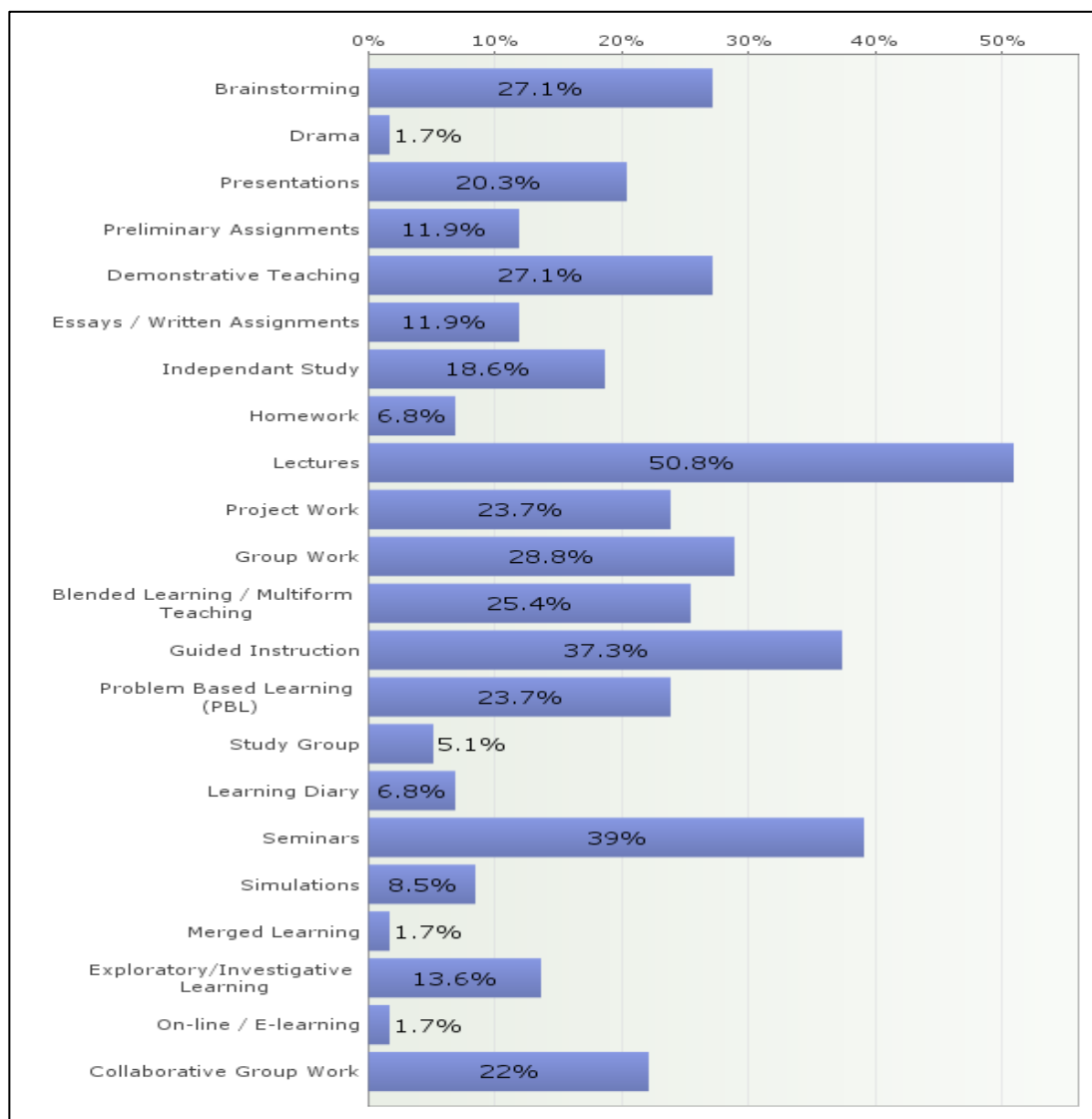


Figure 13. Participants' opinions of teaching methods which best promote learning (n=59)

Participants' opinions about their involvement in different aspects of CE are plotted in Table 6. Division of respondents over learning via informal study methods demonstrated a nearly even three-way split, the largest portion of which indicated 33%

somewhat agree. Interest in self-development proved very much 96% of respondents on the side of agreement. Belief that CE supports participants work was also strongly positive with 100% in agreement. There was strong siding in opposition at 98% over participating in CE due mandating. Physiotherapists were 92% in agreement that CE is an important aspect of their professional growth. Participants indicated 85% in opposition to having all professional skills and knowledge required. Concentrations of respondents erred 38% on side of opposition to CE opportunities fulfilling their professional educational needs and 37% undecided. Nearly half 47% of study participants demonstrated uncertainty as to whether or not the available modes of participating in CE were lifestyle appropriate.

Table 6. Participants' personal opinions regarding participation in CE

	1= Fully Op- posed % (n)	2= Some- what Op- posed % (n)	3= Neither Opposed or Agree % (n)	4= Somewhat Agree % (n)	5= Fully Agree % (n)	Average (SD)	Median
I learn best using informal study methods (n=60)	3.3 (2)	31.7 (19)	28.3 (17)	33.3 (20)	3.3% (2)	3 (0.97)	3
I've always been interested in developing myself (n=60)	0 (0)	0 (0)	3.3 (2)	38.3 (23)	58.3 (35)	4.6 (0.57)	5
Participating in CE supports my work (n=60)	0 (0)	0 (0)	0 (0)	36.7 (22)	63.3 (38)	4.6 (0.49)	5
I participate in CE only because it's mandatory (n=60)	75 (45)	23.3 (14)	0 (0)	0 (0)	1.7 (1)	1.3 (0.65)	1
CE is an important part of my professional development (n=60)	1.7 (1)	0 (0)	6.7 (4)	31.7 (19)	60 (36)	4.5 (0.77)	5
I already possess all knowledge and skills I require in my work (n=60)	60 (36)	25 (15)	11.7 (7)	3.3 (2)	0 (0)	1.6 (0.83)	1
The CE opportunities on offer fulfill all my educational needs as a professional (n=60)	8.3 (5)	38.3 (23)	36.7 (22)	16.7 (10)	0 (0)	2.6 (0.87)	3
The various alternative means of participating in CE are well suited to my lifestyle (n=60)	0 (0)	10 (6)	46.7 (28)	33.3 (20)	10 (6)	3.4 (0.81)	3
Total	18.5%	16%	16.7%	24.2%	24.6%	3.2	3

The views study participants (n=46) pertaining to need for apprenticeship type CE are demonstrated in Table 7. This information does not contain responses from the questionnaire pilot group as it was introduced as a post pilot questionnaire modification. The majority of respondents 65% expressed opinions in favor of there being a need for apprenticeship type CE assisting new graduate integration into working life. Participants (77%) viewed a need for apprenticeship type programmes as a means to achieve specialization. Non-nationals / immigrant physiotherapists' integration via apprenticeship type CE was seen as needed by 83% of respondents. Of the question respondents (n=5) who answered whether they felt there would be a need for apprenticeship type courses in other areas of physiotherapy, 40% expressed opinion of a need. The additional areas submitted as suggestions pertained to the areas of lymphatic drainage and acupuncture.

Table 7. Participants' opinions regarding apprenticeship type CE

	1= No need % (n)	2= No great need % (n)	3= No opin- ion % (n)	4= Need- ed % (n)	5= Greatly needed % (n)	Average (SD)	Median
The general integration of new physiotherapy graduates into working life (n=46)	2.2 (1)	10.9 (5)	21.7 (10)	52.2 (24)	13 (6)	3.6 (0.93)	4
Assisting physiotherapists who would like to specialize into a specific area (n=46)	2.2 (1)	2.2 (1)	8.7 (4)	58.7 (27)	28.3 (13)	4.1 (0.81)	4
The integration of non-nationals / immigrant physiotherapists into working life in Finland (n=46)	2.2 (1)	0 (0)	15.2 (7)	56.5 (26)	26.1 (12)	4 (0.79)	4
Some other aspect of physiotherapy? (specify) (n=5)	0 (0)	0 (0)	60 (3)	40 (2)	0 (0)	3.4 (0.55)	3
Total	2.1%	4.2%	16.8%	55.2%	21.7%	3.8	4

6.5 Influential Factors

In this section study participants were given the opportunity to openly list three factors about CE opportunities offered which have motivated / influenced most participants' choice of involvement. A study participant total of 90% (n=54) submitted various responses, some individuals gave multiple answers in individual submissions that resulted in an augmented answer rate.

Table 8. CE opportunities' factors which motivated participants engagement

Main categories “motivational factors of CE opportunities for participation”	Subcategories “motivational factors of CE opportunities for participation”	Respondents (n=54) n	Respondents %
CE opportunities'	Instructors	3	6
	Location	5	9
	Price	9	17
	Timing	3	6
	Duration	1	2
	Quality	1	2
	Organization	2	4
Topic	Relation to work	11	20
	Interest	23	42
	Currency	12	22
Development opportunity	Professionalism	13	24
	Knowledge	3	6
	Skills	11	20
	Techniques	2	4
	Own work	5	9
	Specialization	2	4
Advancement opportunity	Career	2	4
	Salary	2	4
	Job security	1	2
Acquisition opportunity	Knowledge	9	17
	Skills	3	6
	Techniques	3	6
Other	Opportunity to keep up with change	1	2
	Provision of future insight	1	2
	Support of personal CE needs	2	4
	Provision of materials for patients	1	2
	Allocation of resources possibility	1	2

Submitted responses were categorically arranged into six main headings: CE opportunities', Topic, Development opportunity, Advancement opportunity, Acquisition opportunity and Other. Each main category was then further divided into subcategories, which can be observed in Table 8. In all 10 responses were excluded due to incomprehensibility, use of unknown abbreviations and response inapplicability. The influencing factor which stood out as most prevalent was Topic interest at 42%. Secondary to this were six other factors: Professionalism development opportunity (24%), Topic currency (22%), Topic relation to work (20%), Skills development opportunity (20%), CE opportunities' price (17%) and Knowledge acquisition opportunity (17%). Examples of participants' related text submissions are provided in italics below.

Most answers submitted were brief and to the point.

“Information / technique currency”

“Career advancement opportunities, possibility of better pay”

Few replies went into greater detail such as that of the following.

“I've a need to learn what's new, which has proven efficacy through research. Good and experienced instructors / teachers who have solid clinical experience with patients”

6.6 Participants Improvement Proposals

The final section provided the opportunity for study participants to openly verbalize any suggestions they may possibly have in mind which could enhance CE in its entirety or in part. Of all the study participants 48% (n=29) made improvement submissions. These submissions were categorically analyzed and separated into three main

topics: Financial issues, Planning & Administration issues, Participants' educational wants & needs. Related subcategories containing respondents' suggestions were made available in (Table 9.).

The most common suggestions for improving CE where 31% (n=9) of respondents concerned involving participants in CE opportunities planning. Examples of participants' related text submissions are provided in italics below.

“For example, once a year nationwide survey for physiotherapists could be done as to what kind of CE they would desire to participate in next year.”

“Through these types of questionnaires, in which professionals can express their educational needs by subject, topicality, etc.”

“Ask employees directly about their educational needs and topics of interest.”

The second most common suggestions made by 17% (n=5) of respondents related to associating CE content to work related issues or challenges. Examples of participants' related text submissions are provided in italics below.

“...tailor it to suit the workplace for example, cement school tasks in accordance with work tasks.”

“Bring it closer to daily life, practical matters. Theories need support practical work.”

“Knowledge should serve working life.”

The third most common suggestions made by respondents touched upon two topic areas each at 14% (n=4). The first concerned financial issues and produced suggestions to increase CE support funding. The second concerned planning and administration issues and generated suggestions to bring instructors and CE opportunities

to participants. Examples of participants' related text submissions are provided respective to their preceding order of mention in italics below. All remaining issue category suggestions submitted scored 10% or under and are displayed in Table xx.

6.6.1 Financial issues

The following texts are examples of respondents' expressions concerning how they felt financial issues affecting CE opportunities should be handled.

“Employers should, particularly in the municipal health care system, invest more money in physiotherapists' higher education.”

“...not everyone has the same possibility to participate in CE for example, due to lack of educational funding or limited work resources. On the other hand, studies which cannot be completed alongside work, adult studies support funds are not enough to manage and it may be a factor limiting study applicants.”

6.6.2 Planning and administration issues

Here examples of participants' responses are given to describe their suggested solutions for planning and administrative issues which affect CE opportunities.

“More locally, for example, bring competent teachers here on weekends.”

“Bring CE to the workplace and shorten distances to educational opportunities.”

Table 9. Participants' CE improvement submissions (n=29)

Main categories “CE issues”	Sub-categories “CE issues”	Suggestions for improvement	Respondents %
Financial issues	- support funding for CE participation	- insufficient, increase funding	14
	- costs of CE courses	- attain sponsorship from private firms - costs sharing between participants and employers - decrease prices - increase availability of apprenticeship-type opportunities	4 4 10 7
Planning and administration issues	- diversity of physiotherapists' responsibilities	- need be taken into account during CE planning	7
	- availability of CE opportunities	- make specialization courses continuously available	4
	- conjoined CE efforts with universities	- alternate between specialization courses offered	4
	- CE possibilities' topic and contents planning	- keep short courses continuously available	4
	- limited participation due location or time constraints	- limited, increase cooperation efforts between AMK and Universities	4
	- CE final projects / development projects	- include potential participants (i.e. via survey)	31
Issues regarding participants' educational wants and perceived needs	- freshness of CE contents	- arrange for instructors and CE opportunities to come to the participants	14
	- clarity of CE opportunities contents	- abolishment, replace with mentoring and practical solutions generation	4
	- direct benefit	- update with newest evidence based knowledge	7
	- professionals' management of own CE needs	- make all content details available, clear and specific	4
	- delegation of CE opportunities	- associate CE opportunities specifically to work-related issues / challenges	17
	- notification of CE opportunities	- increase CE opportunities in the workplace / workplace tailored courses	7
		- increased support of CPD style	4
		- equal opportunities for both permanent and contract employees	7
		- improve advertising	7
		- create a common combined web-page containing all upcoming available CE opportunities and applicable details	10
	- make CE opportunities information available via e-mail notification service	4	
	- available selection of specialization courses	- increase variety on offer (i.e. need for Internal Medicine)	7
	- responsibilities transfer to physiotherapists	- increase CE opportunities promoting transfer of relevant acute conditions assessment and treatment to physiotherapists	10

6.7 Correlations

Due to the design of this study being descriptive in nature and the extensive multi-response options of most questions, ascertaining correlations between variables produced an extensive amount of additional information mostly of little significance due to the low response rate. Of the correlations between variables found to be of interest, the majority of circumstances demonstrated Pearson correlation coefficient values for $r < 0.50$ indicative that relationships between variables were fair to none in cases where probability was $p > 0.05$. A demonstration of relationship values generated using SPSS and Webropol between variables is available in Table 10.

Table 10. Correlations between variables

Variable	Age	Work experience in years	Professional education level	Employment contract
8 Participation in CE last 12 months	p=0.208	p=0.209	Professional degree (Vocational school) p=0.017	No significant findings
12 Interest to participate in CE	p=0,031	p=0,039	Post-secondary education (College diploma) p=0,036	No significant findings
17a I learn best using informal study methods	p=0,733	P=0,363	No significant findings	Part-time p=0.034
17c Participating in CE supports my work	p=0,390	p=0,319	Professional degree (Vocational school) p=0,019	Open-ended p=0.036

The correlations found here may not be strong due sample size and study design, but nonetheless demonstrate relationships of significance regarding clients' CE needs levels and indicate potential needs groups. The eighth variable depicts that those study participants with a Professional degree from a Vocational School tended to participate more in CE courses over the last 12 months prior to the study than other participants. Whereas variable 12 demonstrates that participants most interested to participate in CE were those with Post-secondary College diplomas and also that study participants' interest increased with age and years of experience working. Physiotherapists working part-time found variable 17a (informal study methods) as an effective means of learning. And both participants with a Professional degree from a Vocational School and physiotherapists with open-ended contracts found CE participation supportive of their work (variable 17c).

7 PRECIPITATE OF RESULTS

7.1 Key demographics

Demographic details identified near 50/50 coinciding splits involving three particular variables. The first split concerned Age and demonstrated that just over ½ of respondents were in a group typically 40 or above. A similar split was noted in the details of subjects' Professional Education where those with pre-UAS education represented nearly ½ of the study participants. Work experience in years also demonstrated that over ½ possessed greater than 16 years of experience, but equated crossover of 6% more individuals than were identified in Professional Education.

The first group to be considered consists of mature individuals with many years of experience and pre-UAS education. The other, classifies a group typically under 40, less experienced, but in possession of UAS Bachelors' degrees. These details are considered of significance as they ascertain that there are not just two substantial age groups, but three generations, Generation Y (17%), Generation X (45%) and Baby Boomers (38%), which currently need be considered in CE planning and implementation particularly as groups' professional needs, expectations and abilities are likely to differ. Research by Ousey & Roberts (2013, 78) also identified that two similar age groups make up the majority of nursing personnel today and their different learning needs deserve to be noted to ensure continuing education effectiveness.

7.2 Engagement in CE

Physiotherapists demonstrated involvement in CE over the year leading up to their participation in this study to be fairly typical at 83%, a result parallel to that of a 2006 survey conducted by the Chartered Society of Physiotherapy reporting 86% of respondents to have participated similarly in formal clinical courses (Johnson 2011, 7). Motivational reasons for participating in CE concentrated around acquiring new and updating existing professional knowledge and development of existing professional skills.

In contrast nearly 1/5th (17%) had not participated in CE at all over the last year, a high count in comparison to research by Landers, McWhorter, Krum & Glovinski (2005, 868). Reasons for this lack of participation are likely many, but nonetheless may better represent those who could not participate as to those who did not choose to participate. Evidence of this was made more apparent in respondents' replies to queries regarding barriers to their participation in CE.

The main barriers were insufficient CE support funding from employers and course prices. A survey study by Johnson (2011, 10) also reported similarly ranking barriers to CE as were found in this study. This also demonstrates as evidence suggesting a strong reliance of these professionals on employer CE support funds.

Participation levels in employer arranged staff training and additional professional skills training indicate a very strong link between study participants' involvement in CE possibilities and that their motivation for engaging in CE are influenced directly by their needs in working life and even organized to an extent by their employers' own unit functional efficiency needs. The perception physiotherapists have of CE is likely a direct result of influences from their employment environments (Austin & Graber 2007, 1035).

It appears that even with all the CE opportunities, modes, recommendations, regulations and funding available there are still a number of physiotherapists not getting the possibility for involvement due issues associated with limited CE funding. This also indicates a greater number of physiotherapists are not engaging in CE opportunities other than may be deemed necessary by extrinsic influences.

7.3 Opinions and areas of interest

Study participants demonstrated here a strong interest to take part in future CE opportunities. Selections from the numerous CE possibilities varied by degrees, but also demonstrated a healthy interest in most possibilities offered by the UAS.

Interest in course topics was generally well diversified, but did follow an expected pattern. The pattern was indicative of what may be considered typical immediate working life demands, CE opportunities offered trendiness or topicality and price discounts.

When queried about their interest in CE opportunities' topic areas, once more specific descending concentration patterns were noticed. The pattern signified particular interest in manual skills building and musculoskeletal health followed by other topics less commonly required in working life situations. A study conducted by Banning and Stafford (2008, 180) revealed that community nurses advocated similar motivational selections. These responses prospectively also reflect participants' strengths upon which they rely and of which they prefer to keep up-to-date as earlier demonstrated.

The preferred modes of CE participation derived from study participants demonstrated two concentrations of responses. The first of which included practical skills courses, but of particular interest were workplace tailored courses, respondents' second choice. These selections demonstrated practicality as they are often directly beneficial, would provide the greatest assets to the highest number of employees and the later in particular can be molded to focus on workplace specific issues while maximizing usage of time under constraints and possibly also lead to decreased expenditures for participants.

Participants' opinions of learning methods applied in CE demonstrated to be quite diverse, however with preference to standard forms such as lectures. A pattern seen here was one of decreased popularity in relative proportion to increased level of involvement required. Nonetheless, this does also indicate that lecturers/instructors should find participants tolerant/open to less commonly implemented forms of teaching.

The studied physiotherapists demonstrated to be generally positive towards CE previously experienced. However, two issues of concern were raised as there was negativity regarding how well their professional educational needs have been fulfilled and mainly indecision as to how the alternate means of participation in CE were lifestyle

suitable. It would be a necessity to determine if CE opportunities on offer actually meet the needs of clientele appropriately or if change need be initiated to address suitability issues more appropriately (Chau et.al. 2012, 22).

Here significant levels of reception and support for apprenticeship type CE were demonstrated by professionals on the part of those queried. Through their overwhelmingly positive selections participants exhibited a need for and great interest in support of proposed apprenticeship type CE in three areas: integration of new physiotherapy graduates into working life, specialization into a specific area and integration of non-nationals / immigrant physiotherapists into working life in Finland. Such a strong reaction demonstrated the proposed options were considered as appropriate resolutions. In support of this a study on the effectiveness of CE on physical therapists' treatment of neck pain by Cleland, Fritz, Brennan & Magel (2009, 46) demonstrated improvements in client care are infrequent in CE opportunities employing conventional approaches and more positive results would be attained with educational sessions which include ongoing educational contact.

7.4 Factors of CE which motivated participation

There were two factors in particular discovered which held the most bearing when subjects chose to participate in CE opportunities. In particular participants indicated Topic to be of greatest importance and that it had to be of professional interest, current and related to work issues. In addition respondents were influenced by development opportunities which improved overall professionalism and skills. Clienteles' interest and accessibility are the main factors which affect how well CE opportunities succeed (Mathur, Stanton & Reid 2005, 229).

Respondents' selections demonstrated to be very professional in nature as they were mainly to do with the demands of the occupation and improvement of their service provision. There was little indication to do with personal gain or even with how CE opportunities are arranged. Physiotherapists' main concerns exhibited to go beyond convenience, derived from within, showing a committed professional attitude in CE opportunities selection (Johnson 2011, 11; Gunn & Goding 2009, 213; Landers,

McWhorter, Krum & Glovinsky 2005, 868 & Chau et. al. 2012, 25). However, marginal selection of acquisition opportunity for new skills and techniques seemed rather in contradiction, but indicated respondents were more interested in further professional development than professional expansion.

7.5 Participants' development suggestions

Suggestions put forth by study participants proved to be in-depth and insightful. Proposals covered most issues touched upon earlier in the study and indicated issues of CE participants felt need to be addressed. In particular a strong theme demonstrating the desire of the studied physiotherapists to become involved in their own CE planning was noted. Specifically they signified a desire to take on increased responsibility for their own learning through the contribution of input regarding CE topics being offered, much in the same tradition as seen in CPD. Ousey & Roberts (2013, 80) supported involving potential CE participants in educational planning as a means of ensuring needs are met. Also demonstrated here was the lack of a clear channel respondents could use as a means of making direct connection in order to relay professionals' individual educational desires to those in CE planning.

Other suggestions put forth indicated a need for increasing direct benefit of CE while improving the means of bring CE opportunities into the workplace and develop its suitability to working life. Proposals to interlink the two demonstrated once again favor for both Workplace Tailored and Apprenticeship type CE. Two studies, one by Chau et. al. (2012, 27) and the other by Gunn & Goding (2009, 214) were supportive of this conception as they advocated involving CE participants in planning to better address clients' needs and wants more appropriately and resultantly improve CE overall.

In essence study participants were seeking answers and guidance to mainly practical clinical issues. The involved physiotherapists indicated a feeling of need for CE which better directly benefits their work performance, capabilities and ability to cope as professionals. It was concluded by Johnson (2011, 11-12) that as the profession of physiotherapy values evidence based practice, it is therefore reasonable to expect ed-

educational opportunities which better relate practically and clinically to patient care outcomes in the workplace. This also appears to apply with other medical professionals as Hughes (2005, 44) found that nurses also have an appreciation for educational opportunities which are pertinent and related to application in working life.

Participation limitations was another issue of concern that pertained particularly to CE which was held only in specific areas of the country and due to location and/or time constraints made involvement impractical. This portrayed a desire to arrange for certain courses which were rooted in specific regions and not on offer elsewhere to become mobile and move to where patrons could access conveniently, spread-out to other areas or devise other means of participation. Other studies conducted on the topic of CE by Austin & Graber (2007, 1028-1029); French & Dowds (2008, 194-195); Gunn & Goding (2009, 212) and Mathur, Stanton & Reid (2005, 229) demonstrated similar findings with geographical barriers being of great effect toward CE accessibility. However, in most of the aforementioned cases Information Technology solutions were being investigated as alternate means of removing the distance barrier.

The final main issue to be uncovered here pertained to financial issues and once again pointed to insufficient support funding for CE opportunities. Essentially these suggestions were a call to increase employers CE support funding. Limited funding for CE opportunities was found in a studies by Banning & Stafford (2008, 181); French & Dowds (2008, 194-195) & Gunn & Goding (2009, 212) to have a profound impact on staff participation in formal CE opportunities. Essentially a solution is desired which will allow for increased staff participation and yet at the same time keep employers satisfied that duties are not being neglected while staff participate in CE.

To summarize, many of the issues discovered from the quantitative data collected were also brought forth and reinforced by participants' qualitative responses. Physiotherapists who participated in the study and who submitted suggestions proved to be well aware of many issues affecting CE which were in need of development. Participants proved to be a good source of feedback regarding the current state of CE and also demonstrated to be in possession of many possible viable solutions.

8 DISCUSSION

8.1 Objectives

The main objective of this study was to derive knowledge useful in the perpetual development and planning of CE at TUAS through the manufacture and testing of a questionnaire, which could ultimately be applied interchangeably with minor modification to potential client target groups of healthcare professionals. Although the survey itself may not have gathered the desired volume of data due to response rates, the information derived in the overall study proved invaluable and was supported by many similar findings from research conducted with professionals from different areas of healthcare.

8.2 Generations

There are many issues CE planners must consider when preparing opportunities for healthcare professionals. One rather important factor brought up by the results of this study and noted in research by Ousey & Roberts (2013) was the identification of two particular groups, Generation X and Baby Boomers, who currently make up the majority of workers. The challenge in this for those in CE planning will be how to effectively and affordably deal with current differences in learning needs and in which future direction to progress with Generations X and Y.

Baby Boomers were typically rebels in their youth who initiated change, are very committed to their work and thrive on recognition for their experience and a job well done. Generation X learned to be independent, resourceful and self-reliant. They are hard workers who are globally aware and familiar with technology. In learning this generation desires frequent acquisition of new skills which makes them widely employable, but tend to prefer independent work over teamwork. Generation Y typically likes working in teams, being mentored by older more experienced individuals, and knowing what is expected of them. They are technically literate and very reliant on technology, have a great desire to be creative, but want to do things their own

way. Learning opportunities which are variable, challenging, and allow for creativity are characteristically desired by this group. (Kayne 2012; Mayhew 2010.)

Combining groups may in some circumstances prove beneficial as the more youthful can always draw upon experienced workers knowledge, determination and expertise, and they again on youthful exuberance, preference for group work and familiarity with technology. However, complications are more likely to rise with the groups' means of learning and it is for this which suitable solutions need be sought. In addition, many issues brought forward in this study may very well be in relation to differences in generations' separate means of learning and learning needs. In essence, a one-size-fits-all approach may be cost effective, but may no longer be feasible.

8.3 Priorities

In support of many previous studies conducted with physiotherapists concerning CE, this study also demonstrated that physiotherapists are inherently motivated to participate in CE. Their indicated desire to participate even surpassed their actual rate of participation, a sign of strong integration of the LLL principle into the profession and assignment of high value to learning according to Stinson, Pearson & Lucas (2006, 309-311). Study participants' responses demonstrated common selection trends for skills development, knowledge acquisition and knowledge updating based CE, which were directly applicable and of benefit in working life. Such responses indicated professional development to be a priority to that of professional expansion with the individuals studied. However, physiotherapists' indications were particular in indicating that their needs were not being met. Solutions currently in use need be furthered while yet others still need be devised and developed.

8.4 Common desires

Through this study, participants' two most common CE desires were noted. The first was for increased CE opportunities which relate directly to working life and the second was for CE opportunities which are evidence based. In that, both elements are provided for in planning of CE topics and content allowing for ultimate professional

development, skills development and knowledge acquisition. It was mentioned in a study by Hughes (2005, 44) that such desires may signify participants inability to independently apply what they have learned from CE opportunities into practice. This suggests the indicated fault of CE efficacy lies with more than just one party and reliance on clinical research conducted by those in the field should only further encourage cooperative efforts.

The TUAS advertises to offer up-to-date, evidence based and workplace tailored CE opportunities (Website of the Turku University of Applied Sciences 2011b). It is possible to deduce here from the favoritism displayed for apprenticeship type CE, that respondents may have already experienced workplace tailored CE and viewed the apprenticeship option as a possible means of fulfilling their desires with greatest convenience and profound reduction of barriers to CE. In the study by Ousey & Roberts (2013, 80) support can also be found for innovations which take CE out of the traditional classroom. Possible drawbacks of arranging such opportunities likely not seen by study participants include the need for extensive cooperative efforts between educational institutions, clients and in acquisition of individuals appropriately experienced willing to instruct in addition to the time and effort required to produce a quality end product. Nonetheless, in light of such acceptance, all of which apprenticeship type CE and workplace tailored courses encompass deserve further exploration and expansion as to their overall potential and areas of appropriate application within healthcare.

8.5 Participants' suggestions

Study participants' CE improvement proposals demonstrated that there is much which can still be done to advance CE. Of the four main issues raised there were two in particular physiotherapists involved in the study wanted addressed and for which resolutions were submitted. Firstly was proposed the arrangement of a means for CE participants to partake in CE topic and content planning, a necessary step for professional progression as set out by Scales (2011, 53-54) and which may be most efficiently achieved via an electronically formatted annual CE survey. Although, if study response numbers were any indication of future surveys participation, a voluntary

forum would likely not act as a means of obtaining a strong representation of the population.

An annual collection of potential participants' CE requests would likely prove useful in also addressing the second issue by assisting CE planning so as to better support and relate education directly to working life as CE should be focused on needs specific training (Ministry of Social Affairs and Health 2004, 12; Website of the Finnish association of Physiotherapists 2004, 4; IOM 2010, 3).

8.6 Future Study Recommendations

From the discussion of the results and conclusion three particular subjects of interest were derived, which were deemed of importance and worth further future exploration. The first was the discovery in the study that employers' CE desires for employees may differ from that of the employees' desires and warrant investigation. Possible areas to explore may include recognition of differences, the effects of employers influence on employees CE participation, extent of influence and what selections might employees make if they had unrestricted free choice.

The second potential topic derived from this study warranting further study was in conjunction with apprenticeship type CE. This topic has multiple valid possibilities for further study. Suitability of this type of learning could be investigated for example by looking at workplace, subject matter, support network, man-hours, costs and individuals' ability to apply independently what they have learned in practice among other issues. Benefits and drawbacks could be examined along with prospective participants' interest to participate.

The third and final future studies recommendation involves the development of an electronic questionnaire or other format as a media through which allied health care professionals would have the desired potential to participate in and submit input into annual CE topic and content planning. If the current study questionnaire were to be further used for such a purpose it would require simplification modifications leading to reduction in the number of questions and many response options. It would also

prove prudent to conduct questionnaire testing with all potential CE health care client groups and gather details particular to separate generations. Any modifications should also remain open to improving ease of data comparison between different groups and respondents easy of expression.

8.7 Study Limitations

A low questionnaire response rate prompted the inclusion of replies obtained from the Satakunta region questionnaire pilot group. As the study was aimed at only public sector physiotherapists in the South-western region of Finland and their responses were combined to increase the answering rate the results are neither generalizable to the South-western region nor public sector physiotherapists of that region.

Due minimal budget limitations translation of the questionnaire into Finnish was restricted to the author's own ability with the language, assistance from a native Finnish speaker and computer generated translations. This may have resulted in possible mistranslation and/or misinterpretation on the part of study participants of questions' meanings and/or response options. It would have been prudent to have employed a professional translator, though not cost effective.

The design of the constructed questionnaire set limitations on the extent of data which was possible to collect from study participants and also ultimately complicated any possibilities for comparisons. This was mainly due to the descriptive intent of the study, but also due to use of excessive answer options in multiple answer questions. Any planned future use of the questionnaire for comparison between groups would require modification and further testing of the questionnaire would be needed with other potential CE participant groups of professionals.

An excess of questions in particular sections of the questionnaire may have proven counterproductive and even discouraged participants from answering. Elimination of questions pertaining to gender, non-formal CE participation and preferred teaching method would not have harmed the results of this study. In addition some questions

overly extensive answer options such as those in current CE possibilities interest could have been simplified and reduced.

A noticeably decreased answer rate for the final question was noticed in both the questionnaire pilot and main study. Placement of the open-ended question requiring the greatest input effort last may have benefited from earlier placement within the questionnaire. In contrast, if placed too early on in the questionnaire there may always be a risk of non-completion or time for prominent associated issues to surface for documentation.

Involvement with the client for whom this study was conducted at the onset of this undertaking was well arranged. However, as the project progressed it would have been prudent on the part of the author to have arranged more contact session with the client and discover further in-depth their expectations from this project. As the results of the study would be used by their CE department closer contact would have been advisable.

8.8 Study Strengths

The questionnaire was designed specifically for use in this study with intention for future adaptation with other healthcare professionals. In addition the questionnaire was piloted in a different region of the country with a group of professionals similar to that of the main study group. In retrospect responses and demographic data were comparably similar between both groups.

In an overall review the results of this survey study answered all the research questions, described how participants were involved in CE, derived influential factors to participation trends and even obtained suggestions for improvement. The study also further demonstrated how physiotherapists involved in the study are motivated to participate in CE and how it is a subject matter which they deem to be of great importance.

The study provided a timely picture of the current CE situation and how it was related to the involved professionals needs. Demographics in particular brought forth the ever important need to consider all involved generations for effective CE planning and implementation. While it also acted as an opportunity for subjects to voice their opinions without fear of repercussions.

Information generated by this research should prove valuable in future CE planning. The author sees the noticed effectors of CE participation trends, positive support of apprenticeship type CE and improvement suggestions of particular use and importance not only to future CE planning, but also to the progression of physiotherapy as a profession.

This study's validity was pleasantly supported by the findings of previous studies on the same subject matter generated in the field of physiotherapy and other associated areas of healthcare. Results coincided on many occasions with that of much of the reviewed literature previously conducted in other countries and were in some cases remarkably similar. The areas noticed to be most parallel pertained to study participants' levels of CE involvement, concentrations of CE participation and interest, barriers to participation and also in some of the improvement suggestions.

The current system in place for supporting professionals' participation in CE was found to be beneficial, but in need of further attention. As results indicated, the desire of participants was greater than that of those who participated. This uncovered a need for increased employer CE funding besides other liabilities.

In addition to all the findings, one interesting factor brought to light and deemed most important was that of the participants' desire to be involved. Not only in regards to the study itself, but in particular to that of wanting to assist in the planning of their ongoing professional education. With attainment of assistive input direct from participants future CE should prove invaluable.

9 RESULTANT DEVELOPMENTAL PROPOSALS

The author's suggestions for improving CE for physiotherapists based upon the findings of this study are as follows:

- The particulars of separate generations' needs, wants, and learning traits are of great worth to CE planning. They hold the potential to give planners direction and may also assist in revealing possible future trends. If not already noted, it would serve CE instructors and planners well to make efforts in designing CE opportunities which take the attributes of generations into consideration. This may warrant offering separate learning opportunities such as traditional teaching methods with Baby Boomers and combined courses for Generations X and Y who display more complimentary learning styles and needs.
- Workplace tailored options for short-term CE courses have demonstrated to be highly desired in this study as were the possibilities of long-term CE applications through apprenticeship type courses. Both options are seen as rewardingly viable possibilities which greatly satisfy CE needs criteria. The recommended path forward would be to further expand workplace tailored course options already on offer, develop the potential applications of apprenticeship type courses, secure their means of attainment and delve into areas where needs for such applications are identified.
- To assist in assessing different generations' trends, identify needs and gather pertinent input for CE planning a condensed annual CE survey is proposed. Incorporation into the annual performance review is seen as the most likely sustainable means of securing adequate response rates and obtaining the best representative picture of the physiotherapy population in question. However, in this anonymity need be carefully considered so as to obtain participants' true responses separate from employers'/clients' assessments and minimize on potential external influences.

Of the aforementioned suggestions some may well be already in the works. Nonetheless, CE planning stands to benefit from the additional input provided herein. In short, if well managed an annual survey has good potential to ensure CE remains up-to-date with both participants' wants and needs while simultaneously providing insights as to possible upcoming trends and even act as a means of monitoring fluctuations in generations. As needs and attributes vary between generations heightened instructor awareness, flexible approaches and use of innovative techniques with good

crossover potential such as workplace tailored and the proposed apprenticeship type courses will likely be fundamental to success.

As part of a learning organization the CE department already is aware that perpetuating Finnish lifelong learning policy requires that development and planning are continuous and evidence based, that methods and content meet all potential pupils' needs right up until careers end. They must also simultaneously make use of all relevant resources and follow important trends in order to assist futures planning and forward thinking. In other words, the means to flourish is through encouraging progress, making necessary innovations, being flexible and open-minded, staying aware of trends and preparing for the future.

REFERENCES

- Austin, T.M. & Graber, K.C. 2007. Variables Influencing Physical Therapists' Perceptions of Continuing Education. *Physical Therapy* 87, 1023-1036. Referred 4.4.2012. <https://web.ebscohost.com/>
- Banning, M. & Stafford, M. 2008. A hermeneutic phenomenological study of community nurses' CPD. *British Journal of Community Nursing* 13, 4, 178-182. Referred 2.9.2013. <https://web.ebscohost.com/>
- Burns N. & Grove S.K. 2009. *The practice of nursing research: Appraisal, synthesis and generation of evidence*. W.B. Saunders Comp., Philadelphia.
- Chau, J., Chadbourn, P., Hamel, R., Sherman, M., Robles, B., Chan, L., Cott, C. & Yeung, E. 2012. Continuing Education for Advanced Manual and Manipulative Physiotherapists in Canada: A Survey of Perceived Needs. *Physiotherapy Canada* 64 (1) 20-30. Referred 3.5.2012. <https://web.ebscohost.com/>
- Cleland, J.A., Fritz, J.M., Brennan, G.P. & Magel, J. 2009. Does Continuing Education Improve Physical Therapists' Effectiveness in Treating Neck Pain? A Randomized Clinical Trial. *Physical Therapy* 89 (1) 38-47. Referred 3.5.2012. <https://web.ebscohost.com/>
- ER-WCPT (Europe Region World Confederation of Physical Therapy). 2010. Informative Paper with Recommendations on Continuous Professional Development. General Meeting of the Europe Region of the WCPT 2010.
- French, H.P. & Dowds, J. 2008. An overview of Continuing Professional Development in physiotherapy. *Physiotherapy* 94, 190-197. Referred 3.5.2012. <https://web.ebscohost.com/>
- Garvin, D.A., Edmonson, A.C. & Gino, F. 2008. Is Yours a Learning Organization? *Harvard Business Review*. 109-116. Referred 28.3.2013. <https://web.ebscohost.com/>

Giri, K., Frankel, N., Tulenko, K., Pucket, A., Bailey, R., & Ross, H. 2012. Keeping Up to Date: Continuing Professional Development for Health Workers in Developing Countries. Capacity Plus. Technical Brief 6. Sept. 2012. 1-6. Referred 28.3.2013. <http://www.capacityplup.org/>

Gunn, H. & Goding, L. 2009. Continuing Professional Development of physiotherapists based in primary care trusts: a qualitative study investigating perceptions, experiences and outcomes. *Physiotherapy* 95, 209-214. Referred 3.5.2012. <https://web.ebscohost.com/>

Hughes, E. 2005. Nurses' preceptions of continuing professional development. *Nursing Standard*. 19, 43, 41-49. Referred 2.9.2013. <https://webebscohost.com/>

IOM (Institute of Medicine). 2010. Redesigning Continuing Education in the Health Professions. Washington, DC: The National Academies Press. Referred 28.3.2013. <http://site.ebrary.com/lib/samk/Doc?id=10370370>

Johnson, H.C. 2011. CPD decisions: exploring the reasons why NHS physiotherapists engage in career long learning. Leeds: University of Leeds. Referred 3.5.2012. www.leeds.ac.uk/medicine/meu/lifelong08/Helena_Johnson.pdf

Jordan, A., Carlile, O., & Stack, A. 2008. Approaches to learning: A Guide For Teachers. Berkshire, GBR: Open University Press. Referred: 28.3.2013. <http://site.ebrary.com/lib/samk/Doc?id=10256405>

Kalamas, D.J. & Kalamas, J.B. 2004. Developing Employee Capital: Setting the Stage for Lifelong Learning. Amherst: HRD Press. Referred 28.3.2013. <http://site.ebrary.com/lib/samk/Doc?id=10379750>

Kaye, B. 2012 Four Generations. Develop and engage them at work. Referred 30.9.2013. <https://web.ebscohost.com/>

Koltz, A. & Lynch, C. 2007. Strategies for Research in Constructivist International Relations. Armonk, USA: M.E. Sharpe, Inc. Referred: 28.3.2013. <http://site.ebrary.com/lib/samk/Doc?id=10178084>

Kondalkar, V.G. 2009. Organizational Development. Delhi: New Age International. Referred 28.3.2013. <http://site.ebrary.com/lib/samk/Doc?id=10318714>

Kopra, P. 2004. Hyvin suunniteltu, kerralla valmis- Turun ammattikorkeakoulun täydennyskoulutus- ja palvelukeskuksen koulutuksen suunnittelun prosessit. Turun Ammattikorkeakoulun Raportteja 28. Turku: Turun Ammattikorkeakoulu.

Landers, M.R., McWhorter, J.W., Krum, L.L. & Glovinski, D. 2005. Mandatory Continuing Education in Physical Therapy: Survey of Physical Therapists in States With and States Without a Mandate. Physical Therapy 85, 861-871. Referred 4.4.2012. <https://web.ebscohost.com/>

Mathur, S., Stanton. S.& Reid W.D. 2005. Canadian Physical Therapists' Interest in Web-Based and Computer-Assisted Continuing Education. Physical Therapy 85, 226-237. Referred 3.5.2012. <https://web.ebscohost.com/>

Mayhew, B. 2010. Multigenerational Characteristics. Communication Training. Referred 30.9.2013. <https://www.brucemayhewconsulting.com>

Ministry of Education. 2002. Background report Polytechnic education in Finland. Helsinki: Department for Education and Science Policy.

Ministry of Education and Culture. 2012. Finnish Education in a nutshell. Espoo: Kopijyvä. ISBN:978-952-13-5387-1

Ministry of Social Affairs and Health. 2004. Terveystieteiden täydennyskoulutussuositus. Helsinki: Sosiaali- ja terveysministeriön oppaita 2004:3.

Mustajoki M. 2003. Terveystieteiden henkilöstön täydennyskoulutus Suomessa ja eräissä muissa maissa. Sosiaali- ja terveysministeriön monisteita 2003:11.

Ousey, K. & Roberts, D. 2013. Improving access to CPD for nurses: the uptake of online provision. *British Journal of Community Nursing* 18, 2, 78-83. Referred 2.9.2013. <https://web.ebscohost.com/>

Parahoo, K. 2006. *Nursing Research: Principals, Processes and Issues*. New York. Palgrave MacMillan

Salonen, K. 2012. Kehittämistoiminnan Konstruktivistinen Malli. In: Hautala, T., Ojalehto, M. & Saarinen, J. 2012. *Työelämää Kehittämässä: Ammattikorkeakoulu projektimaisen kehittämisen kumppanina*. Turku: Tampereen yliopistopaino- Juvenes Print Oy. 22-31.

Scales, P. 2011. *Continuing Professional Development in the Lifelong Learning Sector*. Berkshire, GBR: McGraw-Hill Professional Publishing. Referred 28.3.2013. <http://site.ebrary.com/lib/samk/Doc?id=10441935>

Schweitzer, L. & Stephenson, M. 2008. Charting the challenges and paradoxes of constructivism: a view from professional education. *Teaching in Higher Education*. 583-593. Referred 28.3.2013. <https://web.ebscohost.com/>

Stinson, L., Pearson, D. & Lucas, B. 2006. Developing a learning culture: twelve tips for individuals, teams and organizations. *Medical Teacher*. 4. 309-312. Referred 28.3.2013. <https://web.ebscohost.com/>

Turku University of Applied Sciences. 2011. *Corporate Social Responsibility Review*. Turku University of Applied Sciences.

Website of the Chartered Society of Physiotherapy. 2007. Policy statement on Continuing Professional Development (CPD). Referred 19.3.2012. <http://www.csp.org.uk/>

Website of the Finnish Advisory Board on Research Integrity. 2012. Referred 5.1.2013. <http://www.tenk.fi/en/>

Website of the Finnish Association of Physiotherapists 2004. Fysioterapeuttien Täydennyskoulutussositus. Referred 3.9.2012. <https://www.suomenfysioterapeutit.fi/>

Website of the Finnish National Board of Education. 2010a. Polytechnic Education. Referred 8.4.2013. <http://www.oph.fi/english/>

Website of the Finnish National Board of Education. 2010b. Higher Education for Adults. Referred 8.4.2013. <http://www.oph.fi/english/>

Website of the Finnish National Board of Education. 2011a. Education structure. Referred 8.4.2013. <http://www.oph.fi/english/>

Website of the Finnish National Board of Education. 2011b. Higher Education for Adults. Referred 8.4.2013. <http://www.oph.fi/english/>

Website of the Ministry of Education and Culture. 2013a. Education system in Finland. Referred 8.4.2013. <http://www.minedu.fi/>

Website of the Ministry of Education and Culture. 2013b. Formal education in Finland. Referred 8.4.2013. <http://www.minedu.fi/>

Website of the Ministry of Education and Culture. 2013c. Polytechnic education in Finland. Referred 8.4.2013. <http://www.minedu.fi/>

Website of the Ministry of Education and Culture. 2013d. Adult Education. Referred 8.4.2013. <http://www.minedu.fi/>

Website of the Ministry of Education and Culture. 2013e. Ammattikorkeakouluja uudistetaan. Referred 19.4.2013. <http://www.minedu.fi/>

Website of the Ministry of Education and Culture. 2013f. Polytechnic reform 2011-2014. Referred 19.4.2013. <http://www.minedu.fi/>

Website of the Ministry of Education and Culture. 2013g. Ammattikorkeakoulu-uudistuksen aikataulu. Referred 19.4.2013. <http://www.minedu.fi/>

Website of the Ministry of Education and Culture. 2013h. Objectives and programmes. Referred 19.4.2013. <http://www.minedu.fi/>

Website of the Ministry of Education and Culture. 2013i. Financing of education. Referred 19.4.2013. <http://www.minedu.fi/>

Website of the Ministry of Education and Culture. 2013j. Educational foresights. Referred 19.4.2013. <http://www.minedu.fi/>

Website of the Ministry of Social Affairs and Health 2004. Terveystieteiden tutkimuskeskus. Helsinki. Referred 18.1.2013. <http://www.stm.fi/etusivu>

Website of the Turku University of Applied Sciences. 2011a. Täydennystä osaamisen. Referred 15.4.2013. <http://www.tuas.fi/public>

Website of the Turku University of Applied Sciences. 2011b. Continuing Education and Services. Referred 15.4.2013. <http://www.tuas.fi/public>

Website of the Turku University of Applied Sciences. 2012a. Tervetuloa täydennyskoulutukseen!. Referred 15.4.2013. <http://www.tuas.fi/public>

Website of the Turku University of Applied Sciences. 2012b. Our Continuing Education Department Promotes Regional Development. Referred 15.4.2013. <http://www.tuas.fi/public>

Website of the Turku University of Applied Sciences. 2013. Seminaarit ja muu koulutus. Referred 16.4.2013. <http://www.tuas.fi/Public>

Website of the World Confederation for Physical Therapy. 2013. WCPT Glossary: Lifelong Learning (LLL). Referred 25.3.2013. <http://www.wcpt.org>

APPENDIX 1. COVER LETTER

Hyvä fysioterapeutti,

Opiskelen Satakunnan ammattikorkeakoulussa kuntoutuksen ylempää AMK - tutkintoa. Tutkimukseni tarkoituksena on kuvata fysioterapeuttien kiinnostusta ja osallistumista lisä- ja täydennyskoulutukseen.

Pyydän Sinua ystävällisesti osallistumaan tutkimukseen vastaamalla oheiseen sähköiseen kyselylomakkeeseen ----- 2013 mennessä ja palauttamaan kyselyn lomakkeessa olevalla lähetä-toiminnolla suoraan tutkijan webropol -tutkimusosoitteeseen. Kyselyyn vastaaminen tulkitaan suostumukseksi osallistua tutkimukseen. Osallistuminen on vapaaehtoista. Tulosten avulla voidaan kehittää Varsinais-Suomen ammattikorkeakoulujen lisä- ja täydennyskoulutuksia.

Vastaukset käsitellään luottamuksellisesti. Vastajien henkilöllisyyttä ei kysytä, eikä voida tunnistaa missään tutkimuksen vaiheessa. Aineisto säilytetään tutkimuksen ajan huolellisesti lukitussa tilassa, ja se hävitetään asianmukaisesti, kun sitä ei enää tarvita. Tulokset raportoidaan Turun ja Satakunnan ammattikorkeakoulun lopputyönä sekä mahdollisesti artikkelina tieteellisessä ja ammattilehdessä 2013 – 2014. Vastaan mielelläni tutkimusta koskeviin kysymyksiin. Ohjaajanani toimii TtT Merja Sallinen.

Paljon kiitoksia osallistumisestasi jo etukäteen!

Kyselylomakkeen vastauslinkki:

wepropol- link

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APPENDIX 2. QUESTIONNAIRE

Kyselytutkimus lisä- ja täydennyskoulutuksesta

Tämän kyselylomakkeen sisältö on jaettu eri aihealueisiin: taustatiedot, osallistuminen lisä- ja täydennyskoulutukseen, koulutuksen kiinnostavuus, mielipide-osio sekä mahdolliset koulutustarpeet. Valitse kunkin kysymyksen kohdalla klikkaamalla oikea vaihtoehto tai vastaa sille varattuun tilaan.

1. Sukupuoli:

- Mies Nainen

2. Ikäsi vuosina:

- 20 tai alle
 21...
 66 tai yli

3. Mikä on Sinun ammatillinen koulutusasteesi (valitse kaikki, mitkä olet suorittanut)?

- Ammattikurssi tai vastaava
 Ammatillinen tutkinto (Ammattikoulu)
 Opistoasteen koulutus
 Ammattikorkeakoulututkinto (AMK)
 Erikoistumisopinnot
 Ylempi ammattikorkeakoulututkinto (YAMK)
 Alempi korkeakoulututkinto (yliopisto; kandi)
 Ylempi korkeakoulututkinto (yliopisto; maisteri)
 Akateemiset jatko-opinnot (tutkijakoulutus)
 Muu koulutus, mikä

4. Kuinka monta työkokemusvuotta Sinulla on fysioterapeuttina?

- alle 1 vuosi
 1...
 46 tai yli

5. Missä työskentelet fysioterapeuttina tällä hetkellä?

Valitse vain paikka/paikat, joissa työskentelet nykyään.

- Sairaala
- Terveyskeskus
- Yksityinen hoitolaitos
- Tutkimuslaitos/ yksikkö
- Kuntoutuslaitos/ kylpylä
- Työterveyshuolto
- Kansanterveys-, liikunta- ja vammaisjärjestöt
- Vanhainkoti
- Päiväkoti
- Kotihoito
- Koulu- ja liikuntatoimet
- Yrittäjä
- Erilaiset asiantuntijatehtävät
- Projektityö
- Urheilujärjestö, -seura (palkallinen työ)
- Muu, mikä
- _____

6. Millainen on työsi sopimuksesi nykyisessä työpaikassa?

(päätyö)

- Täysaikainen
- Osa-aikainen
- Määräaikainen työsuhde
- Toistaiseksi voimassa oleva työsuhde

7. Mihin seuraavista epävirallisista koulutuksista/ohjauksista olet osallistunut viimeisen 12 kuukauden aikana työstäsi?

- Mentorointi
- Tiedonhaku internetistä/kirjastosta
- Reflektiivisen päiväkirjan pito
- Osallistuminen työryhmiin (esim. laaturyhmä)
- Työpaikkakoulutus (koulutuspalaveri)
- Keskustelu kollegoiden kanssa
- Opiskelijoiden ohjaaminen ja arviointi

Muu, mitä

8. Oletko osallistunut viimeisen 12 kuukauden aikana johonkin ammatilliseen koulutukseen? *

- Kyllä Ei

9. Mihin seuraavista ammatillisista koulutuksista olet osallistunut viimeisen 12 kuukauden aikana?

- Ammatillinen lisäkoulutus
- Ammattikorkeakoulujen (AMK) erikoistumisopinnot
- AMK seminaarit
- AMK lyhytkurssit
- AMK:n räätälöimä henkilöstökoulutus yrityksille/yhteisöille
- Yliopistojen järjestämä työvoimakoulutus
- Yliopistojen pitkäkestoiset erikoistumisopinnot
- Yliopistojen tarjoamat erilliset opinnot (tutkintoa täydentävät)
- Yliopistojen järjestämät seminaarit
- Yliopistojen järjestämät lyhytkurssit
- Henkilöstökoulutus (työnantajan itse järjestämä koulutus)
- Ammattiliiton järjestämä koulutus (esim. seminaari)
- Ammatilliset perustutkinnot. Mikä?
- Yrityskoulutus

- Näyttötutkinto
- Yksityisen organisaation järjestämä koulutus
- Konferenssi
- Työpajat
- Verkkokoulutus
- Johtamisen erikoisammattikoulutus
- Muu, mikä

10. Mitkä syyt ovat mielestäsi motivoineet Sinua osallistumaan ammatilliseen lisä- ja täydennyskoulutukseen?

Listaa 1-3 asiaa mieltien henkilökohtaisia ja/tai ammatillisia tekijöitä.

- 1 _____
- 2 _____
- 3 _____

11. Mitkä ovat mielestäsi ammatilliseen lisä- ja täydennyskoulutukseen osallistumista eniten estäviä tekijöitä?

Listaa 1-3 asiaa mieltien henkilökohtaisia ja/tai ammatillisia tekijöitä.

- 1 _____
- 2 _____
- 3 _____

12. Olisitko kiinnostunut osallistumaan ammatilliseen lisä - tai täydennyskoulutukseen lähitulevaisuudessa? *

- Kyllä Ei

13. Mitkä seuraavista lisä- ja täydennyskoulutusvaihtoehtoista kiinnostavat Sinua tällä hetkellä?

Voit valita useimpia vaihtoehtoja.

- Ammatillinen lisäkoulutus
- Ammattikorkeakoulujen (AMK) erikoistumisopinnot
- AMK seminaarit
- AMK lyhytkurssit
- AMK:n räätälöimä henkilöstökoulutus yrityksille/yhteisöille
- Yliopistojen järjestämä työvoimakoulutus
- Yliopistojen pitkäkestoiset erikoistumisopinnot
- Yliopistojen tarjoamat erilliset opinnot (tutkintoa täydentävät)
- Yliopistojen järjestämät seminaarit
- Yliopistojen järjestämät lyhytkurssit
- Henkilöstökoulutus (työnantajan itse järjestämä koulutus)
- Ammattiliiton järjestämä koulutus (esim. seminaari)
- Ammatilliset perustutkinnot
- Yrityskoulutus
- Näyttötutkinto
- Yksityisen organisaation järjestämä koulutus
- Konferenssi
- Työpajat
- Internet/ verkkokoulutus
- Johtamisen erikoisammattikoulutus
- Ylempi ammattikorkeakoulututkinto
- Alempi tai ylempi korkeakoulututkinto (yliopisto)
- Akateeminen jatkokoulutus (tutkijakoulutus)
- Muu, mikä

14. Mitkä seuraavista koulutusaiheista kiinnostavat Sinua eniten tällä hetkellä?

Valitse 3 eniten kiinnostavaa vaihtoehtoa.

- Teoriatieto
- Manuaaliset kädentaidot
- Kliinisen arvioinnin osaamisen kehittäminen
- Liikuntasuosituksat
- Terveyden edistäminen
- Seksuaaliterveys, inkontinenssi
- Tuki- ja liikuntaelimestö
- Neurologia
- Lasten hoito (Pediatria)
- Vanhusten hoito (Geriatría)
- Sydän- ja verisuonisairaudet
- Hengityselinsairaudet
- Kivunhoito
- Urheiluvammat
- Johtamistaidot
- Kehittävä tutkimus ja prosessit
- Terveydenhuollon prosessit ja hallinto
- Laadunhallinta
- Muu, mikä?
-

15. Miten haluaisit mieluiten osallistua ammatilliseen lisä - tai täydennyskoulutukseen?

Valitse 3 Sinua eniten kiinnostavaa vaihtoehtoa.

- Internet välitteinen verkko-opetus
- Työpajakoulutus
- Iltakurssit / luennot
- Viikonloppukurssit / luennot
- Työpaikkakoulutus
- Käytäntöön keskittyvä koulutus

- Teoriatiedon kurssit
- Seminaarit / konferenssit
- Muu, mikä?
-

16. Seuraavaksi on esitetty erilaisia väittämiä. Valitse OMAA MIELIPIDETTÄSI parhaiten kuvaava vaihtoehto. *

Väittämiin ei ole oikeita ja vääriä vastauksia, tärkeintä on rehellinen näkemyksesi asiasta.

	1=Täysin eri mieltä	2=Melko eri mieltä	3=EI samaa eikä eri mieltä	4=Melko samaa mieltä	5=Täysin samaa mieltä
Opin parhaiten käyttämällä epävirallisia (ei koulujen tarjoamia) opiskelumenetelmiä esim. oma tiedonhaku	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Olen aina ollut kiinnostunut kehittämään itseäni	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Täydennyskoulutukseen osallistuminen tukee työtäni	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Osallistun täydennyskoulutukseen vain, koska tunnen sen olevan pakollista	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Täydennyskoulutus on tärkeä osa ammatillista kehittymistäni	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Osaan jo kaikki työssäni tarvittavat tiedot ja taidot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tarjolla olevat täydennyskoulutus mahdollisuudet vastaavat kaikkiin minun ammatillisen koulutuksen tarpeisiin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Erilaiset vaihtoehtoiset täydennyskoulutukseen osallistumistavat sopivat hyvin minun elämäntapaani	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Millä opetusmenetelmällä / menetelmillä oppisit mielestäsi parhaiten?

Voit valita useamman kuin yhden menetelmän.

- Aivoriihi
- Draama
- Esitelmät
- Ennakkotehtävät
- Esittävä opetus
- Essee/kirjalliset työt
- Itsenäinen opiskelu
- Kotitehtävä
- Käsiteanalyysi
- Luento
- Projektityöskentely
- Ryhmätyöt
- Monimuoto-opetus
- Ohjattu opetus
- Ongelmakeskeinen oppiminen (PBL)
- Opintopiiri
- Oppimispäiväkirja
- Seminaari
- Simulaatio
- Sulautuva oppiminen (luokkahuone ja virtuaalinen oppimisympäristö sulautetaan yhdeksi kokonaisuudeksi)
- Tenti
- Tutkiva oppiminen
- Verkko-oppiminen
- Yhteistoiminnallinen ryhmätyöskentely
- Muu, mikä?

18. Arvioi kuinka tarpeellinen mielestäsi olisi OPPISOPIMUS-TYYLINEN koulutus seuraavissa asioissa?

Valitse omaa näkemystäsi parhaiten kuvaava vaihtoehto.

	1= Ei tarvetta	2= Eiuuri-tarvetta	3= Eimieli-li-pidettä	4= Tarpeellinen	5= Hyvin tarpeellinen
Vastavalmistuneiden fysioterapeuttien integroiminen osaksi työelämää *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fysioterapeuteille, jotka haluavat erikoistua johonkin määrättyyn erityisalueeseen *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ei-kansallisten fysioterapeuttien integroiminen Suomessa osaksi työelämää (esimerkiksi terveydenhuollon tarvealueille) *	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Johonkinmuuhun fysioterapianosa-alueeseen, mihin? _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Mitkä tekijät vaikuttivat eniten Sinun osallistumiseesi/mielenkiinnon heräämiseen tarjolla olevien ammattillisten lisä- tai täydennyskoulutuksien kohdalla?

Listaa lyhyesti 1-3 asiaa.

- 1 _____
- 2 _____
- 3 _____

20. Miten Sinun mielestäsi voitaisiin parantaa ammatillista lisä- ja täydennyskoulutusta, jotta voitaisiin vastata paremmin ammattilaisten koulutustarpeisiin ja uratavoitteisiin ?
