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Fysioterapeutit

# The core competences of a physiotherapist

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# Background to the project

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# Table of contents



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# Introduction

In 2013, the Finnish Association of Physiotherapists (FAP), Universities of Applied Sciences and the Physiotherapy Department at the Faculty of Sport and Health Sciences of the University of Jyväskylä launched a project to define the concept of core competence. The objective of the four-year project was to describe the core competence of physiotherapists, assist in the development of physiotherapy education, and to help discern future development trends. This report aims to clarify the physiotherapist's professional core competence. This definition will not only help physiotherapists themselves but it will promote cooperation with other partners in the health care profession. The starting point for this publication is the investigation into the core competence of physiotherapists conducted in the Faculty of Sport and Health Sciences of the University of Jyväskylä. A survey was carried out with a group of selected specialists (n = 1909, response rate 37%), along with a group interview (n = 83), followed by two Delphi specialist rounds (n = 47 and 50). The results of the study are summarized in Figure 6 in the chapter on professional competence of a physiotherapist, as well as in a condensed form in other chapters of this report.

Descriptions concerning the core competence of physiotherapists have previously been prepared in several countries: The United Kingdom, Canada, New Zealand, Australia, the Netherlands and, most recently, in Austria, in 2016. These have been reviewed and utilised in the drafting of this report. In addition, we have also accessed materials produced by ENPHE (European Network of Physiotherapy Education) and WCPT (World Confederation of Physical Therapy).

The focus of the report is on competence. Competence can be defined in terms of career advancement, qualifications, the accumulation of expertise, and the availability of human resources. In this report, competence refers to the professional competence of the physiotherapist and how this competence can benefit the community. Theoretical and practical competences merge when the physiotherapist works with his/her clients. Professional competences are not set in stone; they vary according to personal abilities and preparedness and include values and attitudes. The development of competence is based on many factors i.e. competence gained before formal education as well as that learned at university It continues to develop after graduation, throughout the physiotherapist's working life and can involve various training events as well as non-formal learning.

This report on core competence uses the concept of a client, which can refer to patients, rehabilitees, even communities. A client is a person, although physiotherapy may also be used in the treatment of animals. The report describes the development of physiotherapy as a discipline and it also defines what is meant by the term physiotherapy. It describes how physiotherapy is incorporated into rehabilitation. The report describes physiotherapy education and physiotherapy as a profession. One key part of the report involves the clarification of the core professional competence that every physiotherapist should possess. The report also reviews the importance of technological advances in the work of physiotherapists. It also examines the ethical and social competence of physiotherapists. The report finishes with a reflection on future trends.

# Physiotherapy science

The reason why physiotherapy is considered a science is an issue that has been intensely debated both nationally and internationally. In fact, the debate on the physiotherapy paradigm1 is not new – this topic has been discussed for several decades. We will examine a few of the issues raised in this debate; what are distinctively physiotherapy and physiotherapeutic research topics? What kind of questions should be posed in physiotherapy? What items should be explained? How should the results of research efforts be interpreted? Physiotherapy is considered to be a multi-paradigmatic field, and the acknowledgement of this diversity has played an important role in the development of physiotherapy.

Physiotherapy has its origins in two sources: natural science and the humanities. However, it has received inputs from other disciplines, such as medicine and this has meant that the current practice of physiotherapy while leaning towards biology, medicine and the natural science also incorporates a major humanistic component

The science of physiotherapy has developed rapidly and has focused on clinical questions such as assessments of the effects of physiotherapeutic interventions (for example, Pedro's database in 2016 contained 34,000 randomized, controlled trials (RCTs), reviews, systematic reviews and recommendations). Physiotherapy's evidence-based foundation is strong and promotes the development of a scientific approach. Optimal outcomes can be achieved by adopting an evidence-based approach which combines the best available research data with the physiotherapist's clinical experience and the customer's perceptions.

In her article published in the Physical Therapy journal in 1975, Helen Hislop wrote about "The Not-So-Impossible Dream". She claimed that physiotherapy is a science, based on pathokinesiology. The article argued that pathokinesiology examines abnormal human movements and furthermore, it is based on anatomy and physiology. Hislop introduced a hierarchical model describing human structures and functions, and movement can be viewed at different levels: cellular, tissue, organ system, whole body, individual and in groups. Each level described in the model is seen as its own functional entity, but also as part of the following larger entity. Hislop presents the objective of physiotherapy as being to restore a balance to the functional entities after a disturbance.

Cott et al. continued the development of physiotherapy in 1995. They stated that physiotherapy could be conceptualised in such a way that it is clearly distinct from other professions since it examines core concept of movement.

According to their theory, physiotherapy examines the maximally achievable potential of a person's movement in connection with physical, psychological, social and environmental factors. The role of physiotherapy is to support and allow each individual to achieve his/her unique, maximal potential for mobility through various physiotherapeutic practices, such as therapeutic exercise, guidance, the utilisation of technology as well as taking into account environmental changes.

1 In the field of science, a paradigm is a generally recognised doctrine, philosophy or alignment. A paradigm refers to a valid, universally accepted information or framework.

In 2003, Broberg et al. analysed physiotherapeutic education from the point of view of the student's personal learning process. They applied theories of learning to the concept of the physiotherapist's professional development and prepared a model of physiotherapeutic education that consisted of three basic elements: the physiotherapeutic content; the personal learning process of the physiotherapy student; and cultural, historical, political, economic and environmental contexts. The model describes the student as a responsible, active and self-directed developer of his or her own vocational skills; during the training, he/she seeks to develop his/her own working abilities in the current operating environment.

In her doctoral dissertation published in 2016, Wikström-Grotell examined physiotherapy's core concept of movement and, in particular, the conceptual gap between the scientific and practical aspects. The dissertation not only deepened our understanding of the basic concept of physiotherapy but also expanded the understanding of physiotherapy, both as a humanistic science and as a paradigm. Wikström-Grotell views physiotherapy as a humanistic science and suggests that natural movement is the area in which physiotherapy should specialize (compared to Hislop, both humanism and pathology) with the adoption of an autonomous approach.

Figure 1 structures physiotherapy from the point of view of its knowledge base, information-gathering practices, and work-guiding principles. While the physiotherapist is working, these different levels of knowledge are in continuous interaction with one another.

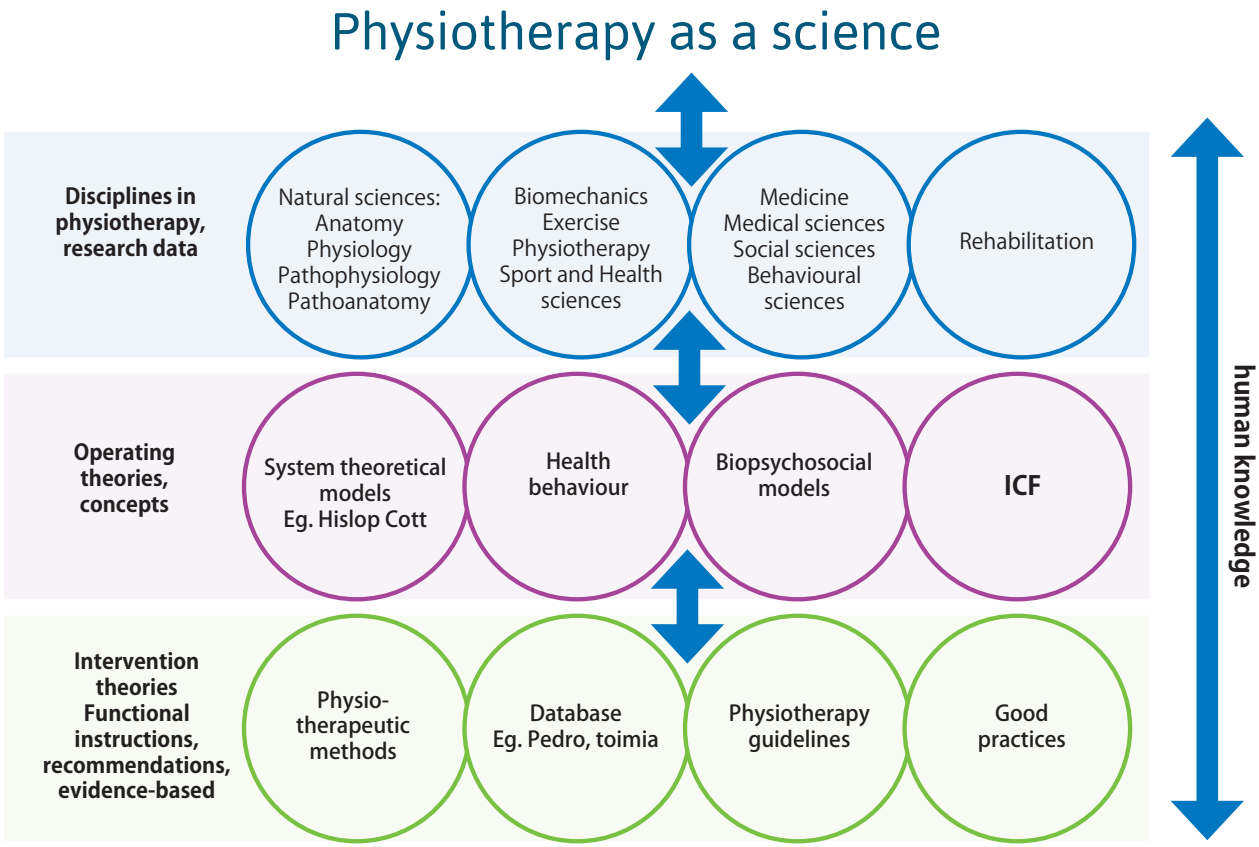


**Figure 1.** The basic aspects of the knowledge base of physiotherapy

Physiotherapy can be defined as a professional discipline, with its specific areas of expertise being health, movement, mobility and functioning. The key techniques applied in physiotherapy include guidance and counselling to promote health and functional ability, therapeutic exercises, manual and physical therapy, and auxiliary services. Physiotherapy provides services to individuals and the general public in situations in which their mobility and functioning are or may be threatened by ageing, injury, pain, illness, dysfunction or environmental factors.

Physiotherapy promotes the active participation of individuals in society, through the development, maintenance and restoration of their health, mobility, physical activity and functional ability throughout their entire life. Physiotherapeutic services are offered in all health care and well-being sectors, such as health promotion, prevention and rehabilitation, considering physical, psychological and social factors. The physiotherapy process (Figure 2) often involves a significant interaction with customers and their families, caregivers and other healthcare professionals and where appropriate, also with other people. Good interaction skills are an essential component in creating a client-focused therapy relationship. A successful interaction is the foundation for a good therapeutic relationship between the physiotherapist and his/her client, in fact a relationship built on trust often determines the success of the collaboration.

Physiotherapy is based on physiotherapy science and it applies research and knowledge from many other fields (e.g. medical science, health sciences, physical education, social and behavioural sciences). Physiotherapists need to understand human's functional abilities and limitations. For that motor learning, motor control, anatomy, physiology and especially pathophysiology create the core of physiotherapist's knowledge base. In addition, a physiotherapist requires information on factors influencing how the client will benefit from his/her guidance and assistance, as well as an awareness of the possibilities of technology, while considering environmental and social issues.

The physiotherapy process is a dynamic series of events triggered by the needs of an individual, group or community. The physiotherapy process proceeds from physiotherapeutic therapy planning, implementation and evaluation. During the various stages of this process, the clinical application of the physiotherapist's expertise involves the combination of diverse knowledge and skills.

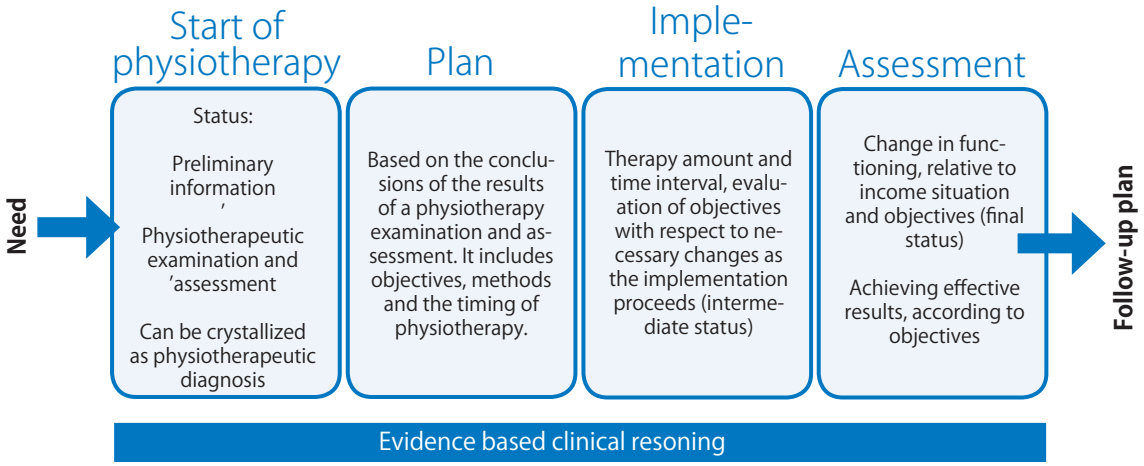


**Figure 2.** Stages of the physiotherapy process

The physiotherapist applies his/her knowledge base during all phases of the physiotherapy process. The physiotherapist systematically assesses the appropriateness and effectiveness of their functions, utilising his/her knowledge base for individual customers, methodologically, applying these at the different organisational levels.

In the European Union's ESCO (European Skills, Competences, Qualifications and Occupations) process, the World Confederation for Physiotherapy (WCPT) defined physiotherapy as follows:

> **Physiotherapy** is the health profession with expertise in movement and exercise prescription throughout the lifespan across the health spectrum. Physiotherapy involves specific interventions to individuals and populations where movement and function are, or may be, threatened by illness, ageing, injury, pain, disability, disease, disorder or environmental factors. Such interventions are designed and prescribed to develop, restore and maintain optimal health.
>
> Physiotherapy is integral to all spheres of health and well-being such as promotion, prevention, habilitation and rehabilitation and encompasses physical, psychological, emotional and social factors. Physiotherapy involves the interaction of the physiotherapist with the client including his/her family, care givers and relevant other health professionals and communities. (http://www.erwcpt.eu/eu_and_advocacy/esco)

The WCPT has produced a description of evidence-based activities (http://www.wcpt.org/sites/wcpt.org/les/les/KN- EBP-Overview.pdf). Evidence-based practice in physiotherapy (EBP) combine the best available research data, clinical experience, patient beliefs and values. It combines common decision-making between a physiotherapist, a patient and a community.

According to WCPT, the objective of an evidence-based practice is to develop physiotherapy by reducing the variability of therapeutic methods. In practical clinical work, the benefits and risks of physiotherapy should be based on high-quality research instead of beliefs based on assumptions. Evidence-based practice utilises the physiotherapist's experience and know-how, as well as the patient's preferences and knowledge of their own lifestyle and resources.

- " Physiotherapist is an expert in mobility and functional ability (agree 98%)
- " Physiotherapy is both individual and grouptherapy in different communities (agree 93%)
- " When planning physitherapy, the cutomers individual mental and social capacity is taken into account (disagree 51%, agree 40%) in additon experience of body images (disagree 56%, agree 28%)
- " International framework Calssification of Functioning, disability and health (ICF) and the use of it is a part of physiotherapists compentece (agree 70%)

Results of the University of Jyväskylä survey which aimed at revealing practising physiotherapists' views on the core competences of physiotherapy.

The physiotherapists were provided with a list of statements with which they could agree or disagree

# Physiotherapy as part of rehabilitation

The purpose of rehabilitation is to promote an individual's functioning, well-being and ability to work. Rehabilitation is also a social system that seeks to influence the functioning, ability to work and social coherence of the entire population (Figure 3). Rehabilitation should be both systematic and multidisciplinary, and often involves a long-term activity aimed at promoting an individual's functioning, ability to cope with routine activities, well-being and employment opportunities. Thus, the rehabilitation process should be a client-based learning process, in which the rehabilitee is genuinely involved (https://www.thl.fi/en/web/vam-maispalvelujen-kasikirja/itsenaisen-elaman-tuki/kuntoutus/kuntoutuksen-maaritelmia). Rehabilitation is located at the interface between health care, social welfare, employment possibilities and teaching.

The rehabilitation system has traditionally been divided into four parts (medical, social, vocational and educational rehabilitation), all of which receive inputs from multi-professional groups. Rehabilitation includes counselling, diverse therapies, education, auxiliary services, and technical solutions to support an individual's functioning. Rehabilitation also includes health promotion, measures that generally support the ability to function and affect the environment, even though they are not considered a part of statutory rehabilitation. Undoubtedly, physiotherapy has a major role in the rehabilitation process.

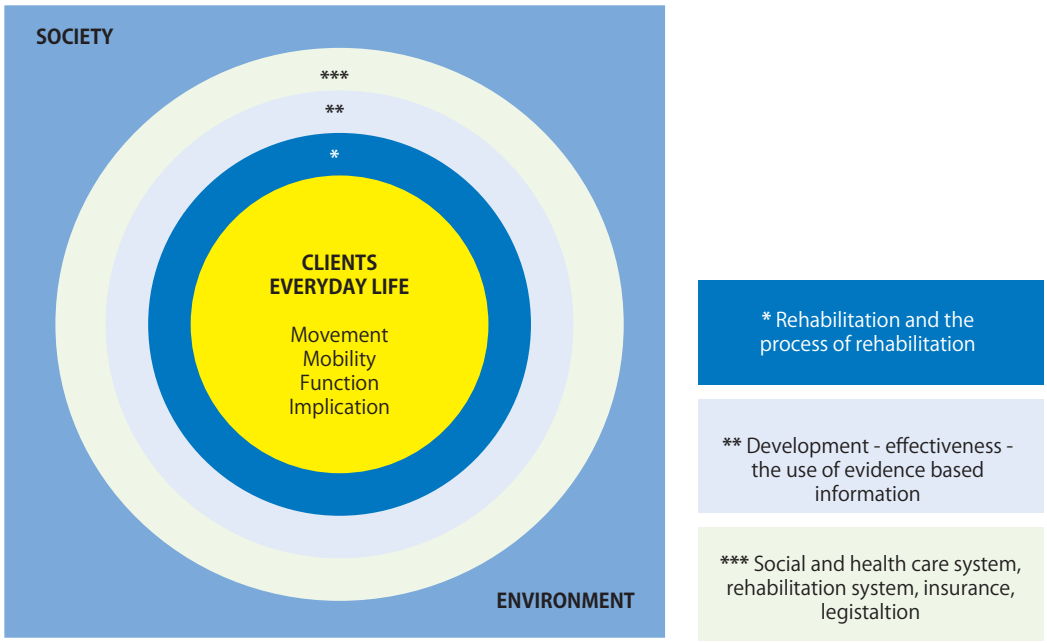


**Figure 3.** Common competence in the rehabilitation sector (Harra et al, 2016)

When a physiotherapist examines a client's ability to function and his/her mobility problems; the examination should be conducted so that the physiotherapist can obtain a broad sense of the client's condition as well as detailing distinct problems. In physiotherapy, the clients should be viewed as members of society and individuals functioning in their distinct environment. The examination is conducted according to the guidelines in the International Classification of Functional Disability and Health (ICF) (Figure 4). This provides a common, internationally-agreed language and framework for health professionals from various fields including also physiotherapists, to describe an individual's functional health and health-related status.

ICF defines health components and health-related aspects of well-being, depicting these themes from the perspective of the body, the individual and the community. ICF views functioning in broad terms involving all body structures and functions, actions (performances) and activities (participations).

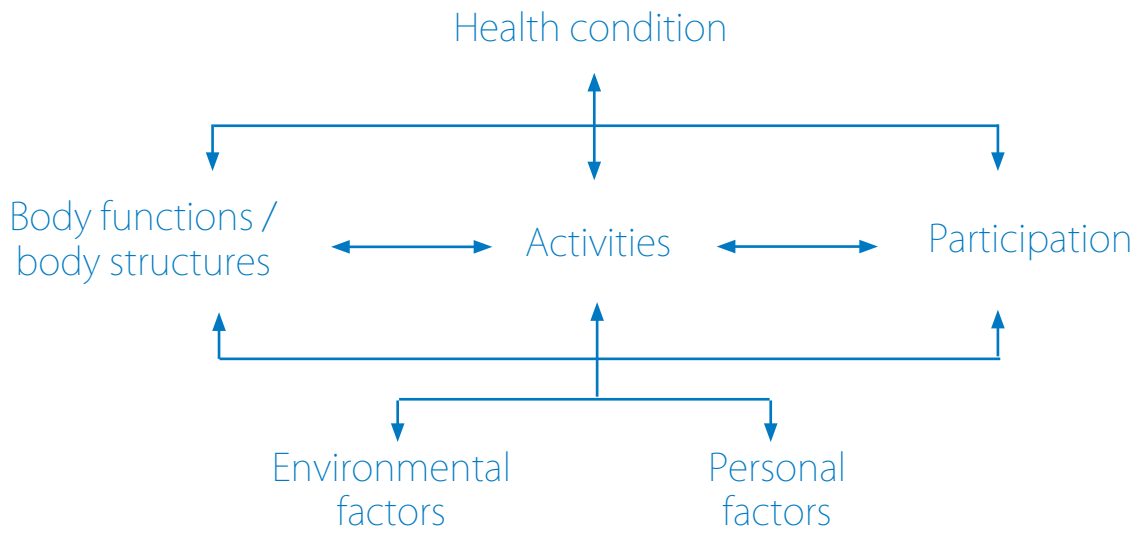


**Figure 4** Human functioning described by the WHO's ICF frame of reference

# Physiotherapy education

Physiotherapy education is organized in Finland in Universities of Applied Sciences;  the bachelor level degree consists of 210 ECTS credits. The qualification includes general skills, a set level of competence in rehabilitation, and professional competence in physiotherapy.

After the completion of the degree requirements, a physiotherapist can apply for different types of supplementary training, specialisation training or continue to master's degree level at a University of Applied Sciences or a University. In addition, physiotherapists can also gain entry to teacher training programmes or continue with their studies to the doctoral level, where physiotherapy will be their major subject (Figure 5).

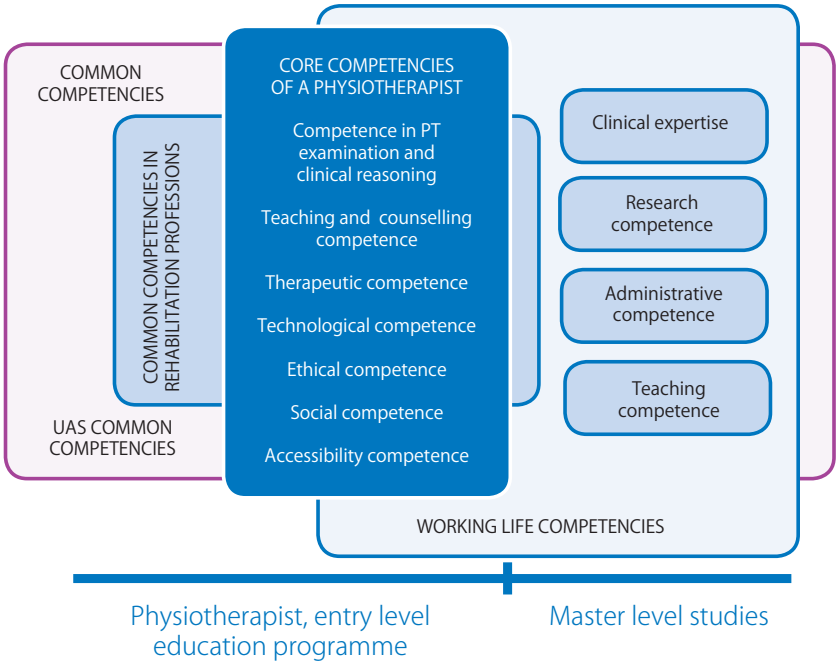


**Figure 5.** The components defining the professional competence of a physiotherapist

In 2017, the Ministry of Education published a report National Framework of Reference for Qualifications and Other Competences". This was based on the European Qualifications Framework (EQF). The Physiotherapist degree is ranked at level six in the eight-level framework.

According to the report, a physiotherapist:

- Possesses extensive and advanced knowledge of his/her own field, which involves a critical awareness and evaluation of theories, key concepts, methods and principles.
- Understands the coverage and boundaries of professional areas and/or disciplines..
- Possesses advanced skills that demonstrate his/her ability to manage issues, has abilities to adapt and to find solutions to even complex or unexpected problems in his/her specialised field. Is able to act as a leader in complex professional activities or projects or is able to work independently in advanced tasks in the field.
- Is capable of decision-making in unforeseen functional environments.

- Possesses the basic prerequisites towards acting as an independent entrepreneur in his/her field.
- In addition to the assessment and development of his/her own competence, he/she is able to keep up with other developments
- Appreciates the importance of life-long learning.
- Possesses the ability to communicate adequately, both verbally and in writing, to other members of the profession and outside parties.
- Capable of communicating and interacting in at least one of Finland's two official languages (Finnish & Swedish) and possessing language skills in one foreign language.

The ENPHE published a report in 2012 entitled the European Qualification Framework for Life Long Learning in Physiotherapy (http://enphe.org/WorkingGroups/FocusGroups(20092012)/EuropeanQualificationsFramework.aspx). The aim was to describe the competence demanded for EQF 6 from the perspective of the physiotherapy profession (Appendix 2).

# Physiotherapist

A physiotherapist is a professional practitioner of rehabilitation and a licensed healthcare professional who holds a qualification in physiotherapy, or an equivalent older term used to designate the same field. The professional title of physiotherapist may only be used and practised by a physiotherapist who possesses the qualification. His/her conduct is supervised by the regional government agencies and the National Supervisory Authority for Welfare and Health, VALVIRA.

The physiotherapist is independently responsible for the planning, implementation, assessment and development of his or her own work. This must take into account ethical and legislative (appendix 3) considerations, as well as the provision of effective, efficient and cost-effective physiotherapy. This must also consider the situation of the client and his/her family, as well as an assessment of the significance of functional capabilities to the client.

The work of a physiotherapist is client-oriented and evidence-based. A physiotherapist works in collaboration with the client as well as with other specialists involved in his/her treatment and rehabilitation, and may be a member of a multidisciplinary working group providing physiotherapeutic inputs. The role of a physiotherapist is to promote, restore and maintain the client's health, freedom of movement, mobility and overall functioning. Physiotherapists work in hospitals, health centres, research institutes and care facilities, in various third sector jobs or as entrepreneurs.

ENPHE's ESCO work group developed a competence description for European physiotherapists in the period 2014–2016. According to this description, a physiotherapist can work in the following roles:

1. Physiotherapy expert
    - 1.1. Assessment skills
    - 1.2. Diagnostic skills
    - 1.3. Intervention skills
2. Communicator
3. Collaborator
4. Manager
5. Health care promotor
6. Reflective practitioner
7. Professional

The report was published on ENPHE's website at the beginning of 2017 and is intended for use by European physiotherapeutic education organisations physiotherapists and cooperation partners.

http://enphe.org/Portals/enphe/ESCO_report_ENPHE_recommendations_April_2017.pdf

" **Physiotherapists** are autonomous health professionals who are responsible for developing, maintaining or restoring motor function and movement throughout the lifespan using evidence-based practice. They relieve pain and treat or prevent physical conditions associated with injury, disease or other impairments. Physiotherapists empower patients and their carers to manage the condition outside clinical settings. They work within their scope of practice and their professional Code of Conduct.

Definition, cf. Appendix 4

# Professional competences of a physiotherapist

The professional competence of physiotherapists should be considered not only from the perspective of knowledge and work, but also from the development of a professional identity. Physiotherapeutic education emphasizes that knowledge is related to how the student understands, analyses and applies information that is central to understanding human health, mobility and functioning. The physiotherapist's professional skills are based on a strong knowledge base and the application of this knowledge. The areas of professional competence of a physiotherapist are described in Figure 6.

The development of a physiotherapist's professional identity involves self-confidence, self-discipline and reflective development. For example, this means that physiotherapists will have the ability to work in a group where they contribute with their own skills and expertise. The recognition of one's own competence and an appreciation of its limits, cooperation skills and the capacity for continuous professional development (CPD) are all part of the development of the professional identity.

The following chapters describe in more detail the physiotherapist's core areas of competence (Figure 6) and their content, as well as what competences members of the profession considered being a physiotherapist's core competence in a survey conducted by the University of Jyväskylä.

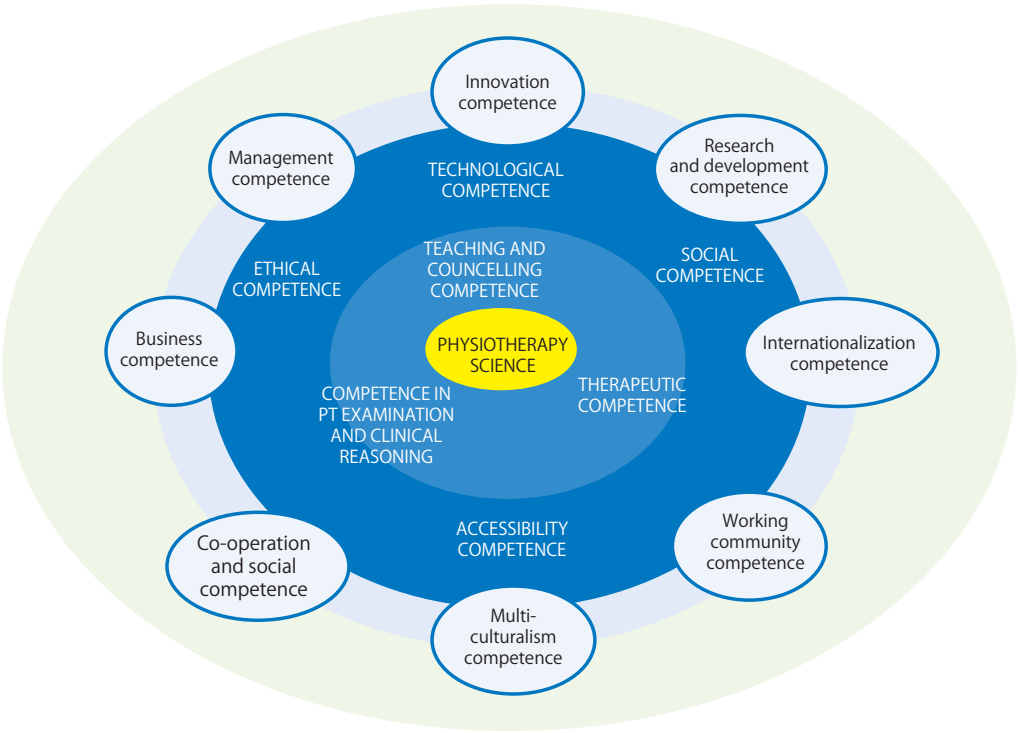


**Figure 6.** The core competences of a physiotherapist are presented at the centre of the figure. The most central area of the figure shows the core competence areas of physiotherapy. The outer circle describes the core areas of competence which are common with other professional groups. The circles on the outside represent the different common areas of competence of social and health care professionals. All areas of competence are constantly interacting with each other.

# Competence in PT examination and clinical reasoning

The purpose of a physiotherapeutic examination is to monitor, evaluate and describe the client's functioning in such detail that it can be used as the basis for developing an appropriate health-care protocol, as well as a physiotherapy plan takes into account the different resources; it can also be a part of a broader rehabilitation or service plan. In order to undertake a client-oriented and wide-ranging physiotherapeutic examination, the physiotherapist should possess a robust knowledge base, problem-solving and clinical reasoning skills, and the ability to treat the client as an individual.

The physiotherapist enters relevant findings in a systematic manner into the client's record, considering the client's own baseline functioning, resources and constraints, whilst following following national specifications and guidelines. Since records are kept, the work of the physiotherapist can be seen to be transparent. Patient records that are meticulously prepared ensure the patient's right to his/her own information and legal protection, as well as ensuring the physiotherapist's own legal protection.

The physiotherapeutic examination and the analysis of the results proceed in an appropriate manner and comply with the accepted safe, and acknowledged procedures as commonly used in physiotherapy as well as being based on evidence based data. In the assessment of the client's functioning, the physiotherapist should adopt examination methods suitable and appropriate for the client; these techniques should also be evidence-based and culturally appropriate. In addition, the physiotherapist may undertake appropriately sensitive and specific measurements and tests. The key physiotherapeutic methods are interviews, observations, manual examinations and measurements.

**Interview**
Through interviews, the physiotherapist can find out more about the client's baseline situation, experiences and expectations. While preparing an examination plan, the physiotherapist also gathers information from other sources, such as patient records, laboratory and X-ray findings, diagnostic tests, as well as information from other social- and health care professionals. On the basis of this data, the physiotherapist can plan an individual physiotherapeutic examination that is appropriate for the situation.

**Observation**
In the assessment of the client's functioning capabilities, the physiotherapist observes the client's functioning and performance, as well as those enabling or limiting factors in the client's own everyday life in different environments, roles and activities. Properties such as motion, movement, posture and balance are of particular interest to the physiotherapist.

**Manual examination**
The physiotherapist should determine the body's structures, functioning and functional restrictions through palpation, as well as applying other manual examination techniques. For example, palpation can assess pain and other tactile sensations, swellings, and muscle, joint and nerve functioning.

The manual examination and assessment should examine joint mobility and muscle tone, and also test for the presence of neurological symptoms. The examination can include specific provocation tests, which relate either to a single tissue or to the entire bodily structure. The examination should also assess how well the patient can control his/her body.

- In the physiotherapy work community, it is clearly understood what type of measurements are used to monitor progress in the client's level of functioning (disagree = 42%, agree = 44%).
- Physiotherapy assesses the level of body functioning and structures (e.g. pain, joint mobility, muscle strength) (agree = 96%), performance level (e.g. change in posture, walking, movement) (agree = 94%), participation level (e.g. performing household tasks, work, recreation and leisure) (agree = 72%). In addition, the assessment should also take into account factors associated with the environment (physical, social and attitudinal environment (agree = 61%).
- Physiotherapy assesses the patient's/client's individual factors (agree = 81%) and documents the patient/ client's functioning and the changes that occur (agree = 82%).
- One essential feature in physiotherapy involves the application of physiotherapeutic methods to assess the patient's need for medical rehabilitation (agree = 93%).

Results of the University of Jyväskylä survey which aimed at revealing practising physiotherapists' views on the core competences of physiotherapy.

The physiotherapists were provided with a list of statements with which they could agree or disagree

**Measurement**

A physiotherapist clarifies how well the client can function; this evaluation can involve systematic functioning indicators for example, from a database, in addition to the state and performance of bodily structures; the actual situation may be clarified by comparison with performance indicators.

Careful measurements produce both reliable and objective information about factors influencing the client's level of functioning, such as the range of motion of joints, muscle strength, balance, walking speed. However, their significance should always be assessed in relation to the client's individual life situation and experiences. The physiotherapist should attempt to explain the results of the examination and how the physiotherapist has interpreted these results to the client in an appropriate and understandable manner, considering the customer's resources, as well as his or her expectations.

**CLINICAL REASONING**

In physiotherapy, clinical reasoning and the drawing of conclusions require both analytical and critical thinking in the assessment of preliminary data and findings; these should be the basis for a more detailed physiotherapeutic examination. In clinical reasoning, the physiotherapist will analyse and assess the signs and symptoms, and will make a synthesis of these findings, considering the opinions of the client. In addition to the examination findings and the client's expectations and experiences, the physiotherapist will consider the opportunities and limitations imposed by the client's immediate and society and environment; this may entail consultations with other professionals and members of the client's local community.

**PHYSIOTHERAPEUTIC DIAGNOSIS**

The physiotherapist shall prepare a physiotherapeutic diagnosis which is based on the results of the physiotherapeutic examination. This diagnosis details the customer's functioning and functional limits, as well as the objectives of the physiotherapeutic protocol and functions as a starting point for some future intervention.

Physiotherapy diagnosis is the result of a clinical decision-making process. It describes the client's functioning, resources and functional limitations, as well as the key factors in the client's environment.

The physiotherapeutic diagnosis acts as a guide in the setting of therapeutic objectives, the establishment of a physiotherapy plan, the implementation of physiotherapy, as well as the cooperation and interactions involved in the client's physical therapy and rehabilitation.

PHYSIOTHERAPEUTIC NOMENCLATURES

Physiotherapy nomenclatures are number-coded classifications depicting the contents of physiotherapeutic services and physiotherapy work. This nationwide nomenclature covers all the key functional areas of physiotherapy. It provides a consistent and comprehensive tool for describing the contents of physiotherapeutic work. Its main uses are in the documentation and compilation of statistics on client-related work, the information of services, and the determination and production of the content of the services provided. In addition, the accepted nomenclature acts as a harmoniser for the terminology and language, an aid in the analysis of time used, and it can also allow other interested parties to become familiarized with the field.

The nomenclature can be found at:

http://www.kunnat.net/fi/asiantuntijapalvelut/soster/nimikkeistot-luokitukset/kuntoutus-erityistyontekijoiden-nimikkeistot/Documents/Fysioterapianimikkeist%C3%B6_2007.pdf

The physiotherapy nomenclature includes the following headings with respect to therapy and the assessment of competence, headlines are:

Physiotherapeutic examination
Employment and functional assessment
Assessment of physical performance
Mobility assessment
Examination and assessment of pain
Preparation of physiotherapy plan

# Teaching and counselling competences

**PHYSIOTHERAPEUTIC GUIDANCE**

Physiotherapeutic guidance and counselling is intended to promote the functioning and health of clients, groups, communities even society by applying diverse manual, verbal, digital, guidance and counselling techniques. In addition to client guidance, physiotherapist guidance may involve advice to relatives. Guidance may also be offered to other social and health care professionals, as well as various stakeholders. The guidance of relatives or other professional groups can take the form of guidance related to ergonomic support to promote the functioning of the client, for example in the working environment.

In physiotherapeutic guidance, the client, consumer groups and communities are encouraged to allocate resources to achieve set physiotherapy objectives or to seek alternative solutions. The guidance provided by the physiotherapist encourages the client to achieve the set objectives. The objective of the physiotherapy process is to achieve a permanent change in the functioning of the customer; this requires the customer to be motivated towards the exercises and other aspects of the intervention.

The physiotherapist must support the client's motivation by providing her/him with evidence-based information of the benefits of the treatment. An important factor in supporting motivation is to understand the customer's awareness of what he/she hopes to achieve, as well as developing therapeutic objectives in cooperation with the client and to plan how these will be implemented in a realistic and meaningful manner. It is evident that physiotherapeutic guidance can influence the quality of the client's movement, mobility and functioning; it is also important to appreciate that motor learning lies at the core of the modifications intended to promote health and functioning.

Motor learning research has revealed that in order to achieve learning outcomes, it is essential for that the client's motor learning should incorporate cognitive processing i.e. the physiotherapist strives to influence the direction of the customer's nervous system, memory and attention. The physiotherapist should promote the connection between motor learning and cognitive processing. In concrete terms, this refers to the application of various modelling techniques (visual, auditory and manual) as well as feedback (knowledge of performance, knowledge of results) during the different stages of learning and different forms of guidance.

To achieve the best possible functional results, the physiotherapist has to be able to understand how the customer's psychophysical cognitive processes are linked to the customer's domestic environment. Evidence-based physiotherapeutic guidance should seek to integrate seamlessly therapeutic exercise with the client's performance, self-assessment and linkage with their communal environment. Guidance supports the client's functional abilities. Thus through the provision of evidence-based guidance, a physiotherapist encourages his/her client's to achieve the commonly agreed objectives, and this improves the effectiveness of the physiotherapy.

PHYSIOTHERAPEUTIC NOMENCLATURE:

With respect to guidance and counselling competence, the main heading topics in the physiotherapy nomenclature are as follows:

Physiotherapeutic guidance and counselling
Health promoting counselling
Guidance and counselling promoting functioning
Guidance and counselling promoting the ability to work
The preparation of an individual physiotherapy programme

- In physiotherapy, guidance and counselling methods are applied according to the client's needs (agree = 89%); the motivating techniques should also be suitable for that type of clientele (agree = 88%).
- In physiotherapy, clients are instructed on how to assess the progress of their own functioning (agree = 86%), and a variety of physiotherapeutic methods are applied appropriate to that clientele (agree = 85%).
- In physiotherapy, the client is guided with respect to the determination of the objectives and planning of activities (agree = 72%).
- Physiotherapeutic methods involve proactive guidance and counselling, manual therapy and therapeutic exercises (agree = 81%).

Results of the University of Jyväskylä survey which aimed at revealing practising physiotherapists' views on the core competences of physiotherapy.

The physiotherapists were provided with a list of statements with which they could agree or disagree

# Therapeutic competences

Therapeutic competence is the ability to support the client's participation in a health-promoting manner and to foster the emergence of a strong interaction relationship. Therapeutic competence includes the ability to perform a physiotherapeutic examination, devise a physiotherapy plan, and implement that plan, taking into account the client's environment in which the implementation will take place. The implementation of therapy can involve therapeutic exercises, manual therapy, physical therapy, as well as guidance and counselling. The therapist must apply evidence-based knowledge in the planning and implementation of the individual's physiotherapeutic treatment protocol.

**THERAPEUTIC EXERCISE**

Therapeutic exercise involves the use of informed, active and functional exercises that are evidence-based; its purpose is to restore the normal functioning of body systems after an illness or injury, or to maintain functioning at an adequate level. It is also used in the prevention of diseases and injuries, in maintaining the ability to work and function, and to promote healing.

Therapeutic exercise is based on methods that are active and functional. These are often progressive, in relation to workload or intensity levels. The exercise has both a local and general effect on bodily functions such as the nervous system, cardiovascular system, musculoskeletal functions of the body and perceived health, as well as functioning.

Therapeutic exercise may be concentrated on a particular part of the body, such as on certain muscles or joints, or it may be more general, such as strenuous exercise in order to improve the general physical condition or functioning. In a therapeutic exercise, it is essential that the effects of the exercise programme are evaluated regularly with the complexity of the programme being gradually progressive.

Therapeutic exercise can be implemented individually or in a group. The impact and effectiveness of therapeutic exercises are unique to each client. Personal objectives and an individual programme are drawn up for each client; these should take into account both the amount of therapeutic exercise in relation to the client's maximum performance, and the relationship between the therapeutic exercise with burdens that are prevalent at work or during one's free time.

PHYSIOTHERAPEUTIC NOMENCLATURE:

On the part of therapeutic competence, the physiotherapy nomenclature headlines are:

Therapeutic exercise
Functioning exercises
Physical functioning exercises
Mobility exercises

- In physiotherapy, therapeutic exercise is applied in a progressive manner, in accordance to principles of exercise physiology (agree = 86%).
- In physiotherapy, the impact of physiotherapy methods are assessed on the clients' lives is assessed (agree = 79%), and new methods of physiotherapy are tested (agree = 78%).
- In physiotherapy, exercises related to motor regulation and motor learning are progressively applied to the client on an individual basis, with attention being paid to factors related to functioning and the environment (agree = 76%).
- The physiotherapist should apply therapy methods suitable for easing pain and pain-related behaviour (agree = 66%)
- In physiotherapy, psychophysical physiotherapeutic competence is required (agree = 98%).

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The physiotherapists were provided with a list of statements with which they could agree or disagree

**MANUAL THERAPY**

Manual therapy refers to therapy based on informed knowledge, evidence and, in particular, clinical experience; its purpose is to restore muscular, nervous, fascial and/or joint structure functions in an optimum manner. It is intended to be used with clients who suffer from reduced joint mobility or impaired movement control. Manual therapy can also be used in the prevention of illnesses and injuries, as well as in the maintenance and improvement of the ability to work and function. Manual therapy is appropriate when performing examinations and therapy concerning the client's functioning such as an assessment of nerves, muscles and joint structures. The starting point for manual therapy is that it should attempt to correct the client's inappropriate load factors, by applying a variety of manual methods. Manual therapy has unique aspects in terms of its impact and effectiveness. Manual therapy can also include manual guidance i.e. teaching how to perform the movement and improve the client's mobility especially teaching how to avoid erroneous loading factors. The forms of therapy used include various manual methods, therapeutic exercises, as well as motivational or guidance chinesiotapes.

**PHYSICAL THERAPY**

Physical therapy including the use of physical agents and mechanical modalities involve methods which are used in physiotherapy and which are based on research and clinical experience. Physical therapy is used to allow the client to recover from injuries and illnesses, to provide pain relief, to support the improvement of various types of tissues, and to activate muscles and promote extensibility. Physical therapy may also be applied before manual therapy, for example, in cases where the physiotherapist's task is more demanding. Physical therapy may also be used as a single therapeutic technique. Forms of physical therapy include different modes of heat and cold treatments, as well as electrical pain-relieving treatments. Physical therapy can also be used to support activation or inhibition of muscular function. Some physical therapy methods, such as Transcutaneous Electrical Nerve Stimulation (TENS) and cold packs, can be used independently by the customer at home after guidance, as independent exercise means.

## Technological competences

Technology aims to increase the client's self-reliance and autonomy, as well as his/her possibilities to participate in social activities and functions. Technology is used in physiotherapy to support the customer's objectives, as part of the immediate physical therapy or it can be provided via remote access, so called "tele physiotherapy". Technology is used in physiotherapy during examinations, guidance and counselling and therapeutic training or it may be incorporated into physical therapy either as an independent activity, or alternatively as part of a broader multidisciplinary rehabilitation process. Certain examinations require access to technological devices (e.g. goniometers, biofeedback, ultrasound).

Technology can be used while providing guidance and counselling; it may be helpful in motivating the client and also their loved ones (e.g. activity indicators). Some technological devises can be beneficial in planning, implementing and monitoring the outcomes of the physiotherapy (e.g. balance-measuring devices, walking and muscle strength monitors). Technological devices may be applied as a part of the therapy such as in the management of pain or muscle tone (e.g. muscle stimulators). In addition, the physiotherapist should be aware of safety and security issues in the use of technology. Remote physiotherapy or tele rehabilitation refers to procedures carried out via wireless/internet connections, such as through a mobile web connection; for example, personal guidance via an audio and/or video link, via text, or via activity indicators (e.g. step monitors or accelerometers) and internet applications for individual guidance or group sessions.

- " Tele technology can be an integral part of the physiotherapy provided to the patient/ client (agree = 91%).
- " In physiotherapy, tools that promote the patient's/ client's functioning are widely applied (agree = 74%).
- " In physiotherapy, health and well-being technology capable of promoting the functioning of the patient/client are often utilized (agree = 38%).
- " In physiotherapy, remote technology that can deliver guidance, counselling and motivation to the client is used in a flexible manner (e.g. smart phone apps, internet, etc.) (agree = 22%).

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The physiotherapists were provided with a list of statements with which they could agree or disagree

## Ethical competences

Professional ethics is based on professional knowledge and competence, as well as the inherent appreciation of values and life experiences. Professional ethics support physiotherapists in ethical issues, decision-making and the monitoring of the physiotherapist's own activities in a critical manner.

The identification of demanding situations requiring ethical reflection is central to every physiotherapist's work. The "Code of Conduct", drawn up by Finnish physiotherapists, is based on the ethical guidelines of the global organisation WCPT. The purpose of the Code of Conduct is to help physiotherapists meet every individual on an equal footing, to make ethically informed choices, to guide and assess their own and other therapists' activities and to justify their actions. A physiotherapist should be familiar with the common values and objectives of health care, in addition to their underlying principles. They support their clients during various life situations, helping them to locate resources and improve their quality of life.

A physiotherapist works together with the client and other parties to support their involvement in the overall rehabilitation process.

Finnish physiotherapists' Code of Conduct (https://www.suomenfysioterapeutit.fi/index.php/eettiset-ohjeet) is examined in more detail in the following context:

- The physiotherapist and the client
- Regulatory compliance
- The physiotherapist's expertise
- The physiotherapist's professionalism
- Quality of actions
- Economy and society
- Information about physiotherapy

## Accessibility competences

Accessibility allows individuals to enjoy equality. A physiotherapist's competence focuses on the assessment of accessibility issues in both the natural and urban environment, and the ability to draw up plans to remove obstacles. Physiotherapists work in multidisciplinary teams when making the assessing the environment; they are specialists in human mobility and functioning and in conjunction with the client, they can assess the functionality of the environment with respect to his/her resources and functional objectives. The environmental planning may be undertaken when new living spaces are being designed as well as renovations. For example, during the planning and design stage of new homes and public buildings, it is important to take account of the fact that individuals with different functioning levels should have freedom of movement in this environment.

When making renovations to some environment, individual changes are made that promote the ability of the client to function appropriately. For example, when planning ergonomic working environments, the recommendations should be made as early as possible, in order to reduce risks that would otherwise exert a negative effect on health and functioning.

Attention to accessibility when planning natural locations also enables safe and easy movement, as well as access to services for as many users as possible, e.g. those with restricted mobility and older people and children.

- The starting point for physiotherapeutic planning is to assess the patient's/client's goals (agree = 95%).
- In physiotherapy, suitable methods of physiotherapy are discussed with the patient/client, in order to decide which method is best for them (agree = 92%).
- Physiotherapy is carried out in collaboration with the patient's/client's close significant others (agree = 83%).
- Health policy decisions have an impact on the work of physiotherapists (agree = 98%), and family-oriented physiotherapy is an everyday part of a physiotherapist's routine work (disagree = 44%; agree = 44%).

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In the planning of functional environments, technology is utilised to secure and facilitate human functioning. Technology must be planned in such a way that it supports human activities and is also suitable for supporting the functions of individuals with different functional resources. Technological support is particularly important for people since these devices can allow them to live safely at home.

A physiotherapist can use technology, e.g. to facilitate movement (automatically opening doors), or to the promote functioning (adjustable kitchen furniture, audio sounds to support cognitive functions or to perceive space). Digital technology either embedded or via the internet can enable users to function, regardless of the time, place and level of functioning. A perceived insecurity should not be a reason for exclusion.

Accessibility means not only accessibility to technology, but also to the immediate environment, the residential surroundings and the community. In this respect, physiotherapists work at the interface of the customer and technology. As a result, they can influence the utilisation of technology.

According to the physiotherapy nomenclature, mobility and functioning related to accessibility are supported by medical aid services, whilst working capacity is supported by physiotherapeutic services. In auxiliary services, the physiotherapist assesses the functioning of their client and helps to devise the best utility service solutions beneficial to the everyday needs of the client.

The physiotherapist's core competence in auxiliary service assessments primarily focuses on the assessment of mobility auxiliary services, in the selection of these services, and providing guidance in their use.

Physiotherapy services that relate to occupational activities can include the assessment and guidance of the customer's functional abilities, an assessment of their ability to work, and guidance in promoting their functioning, as well as providing assistance in the planning and implementation of modifications to the occupational environment.

## Social competences

The physiotherapist's effective social competence is reflected via his/her participation in social activities, monitoring changes in society, and devising responses to these changes. A physiotherapist must be aware of the general major development trends in occupational life and the functional environment, such as globalisation of the economy, the increase in technology and digitalisation. A physiotherapist is expected to have the basic skills to understand the operational and decision-making structures of the social and health services, as well as demands for reforms concerning the provision of services. Competence in social effectiveness is evident in the physiotherapist's social awareness and health policy management.

As an expert in his/her own field, a physiotherapist must be aware of national and international changes in trends that affect society, for example, demographic developments, the ageing of the population, multiculturalism, and the economic and political situation. In addition, attention should be paid to environmental competence and the ecological and ethical implications of work. Similarly, changes to the occupational and functional environment and tele informatics are reshaping the world of work. In the future, physiotherapists will incorporate these innovations into their work for the benefit of the individual client, the health care system and society.

The core areas of competence of physiotherapy are described in relation to the community and society (Figure 7). Leadership competence requires that the physiotherapist displays leadership skills at many different levels e.g. an awareness of political, regional or national decision-making is required. A physiotherapist can be employed at many different management levels in organisations i.e. lower, middle or senior levels. Leadership competence includes organisational skills, problem-solving skills, as well as assessment and leadership decision-making skills and the ability to instigate change. A physiotherapist should be innovative, a visionary and be able to handle critical information. A physiotherapist's economic competence in his/her own respective field is evident in the form of market knowledge, cost and results knowledge, as well as knowledge of business practices.

Physiotherapeutic services should be of high quality and relevant to the customer, as well as being effective and provided in a cost-effective manner. A physiotherapist requires constant updating and renewal of his/her competence, as well as entrepreneurial skills and needs to be able to market this competence. The development of a physiotherapist's competence entails examination technique as well as the application of scientific knowledge and project work skills. In development work, critical thinking skills and an investigative attitude are important.

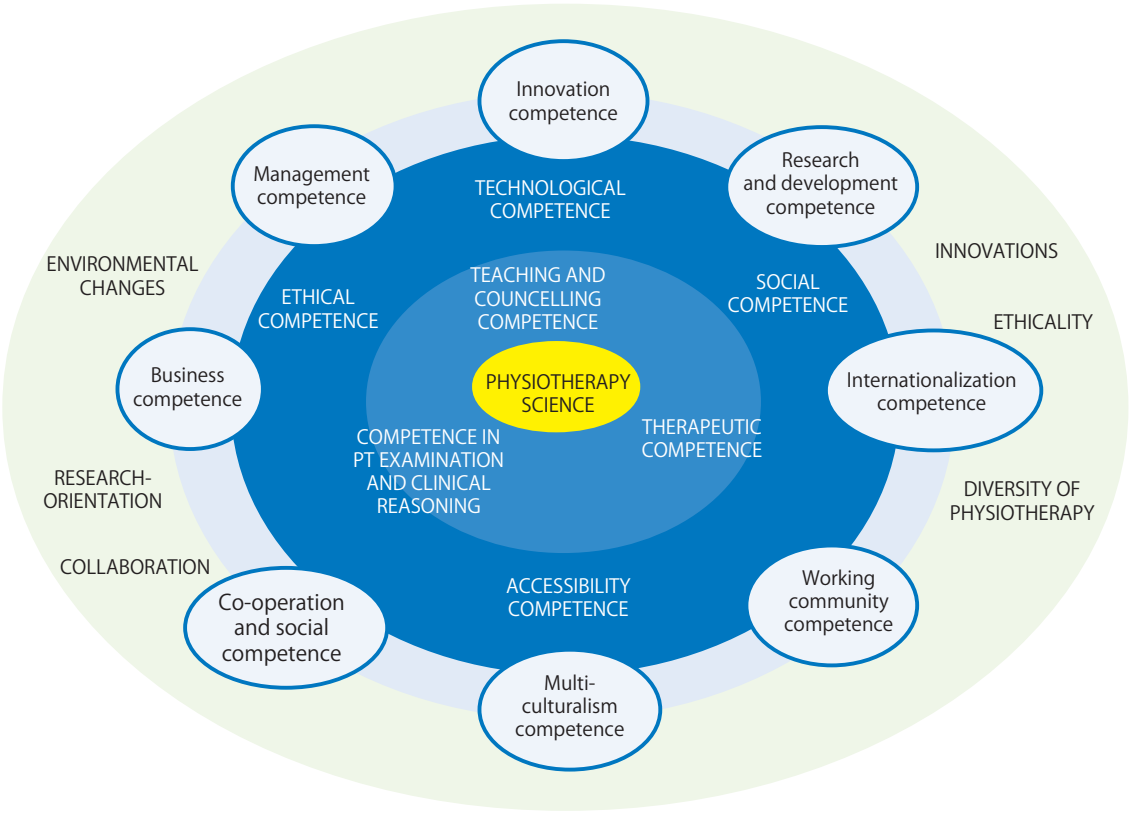


**Figure 7.** The areas of Physiotherapy core competences, described in relation to the community and society

# Physiotherapy and physiotherapy education in transition

**STAGES OF FINNISH PHYSIOTHERAPY EDUCATION**

There is a long tradition of physiotherapy education in Finland (Appendix 1). Physiotherapy education was introduced in the 1800s as one of the subjects in the training of teachers of physical education. This also took place according to an imperial decree adopted in 1908. However, in 1929, a statute was issued in which physiotherapy, then titled lääkitysvoimistelu (literally, medical calisthenics) was separated from the physical education teacher's degree programme and was replaced by its own two-year study course. Lääkitysvoimistelu education which was organized by the University of Helsinki, Department of Physical Education was discontinued in 1942.

At that time, however doctors had discovered the importance of physiotherapy or "mobility aftercare" in reducing disabilities, along with massage and spa treatments for recreational purposes. Physiotherapy also gained new significance in the rehabilitation of people disabled during the Second World War. Education began again in 1945, but this time organized by the Invalidisäätiö (literally, the Foundation for Invalids). In 1956, state lääkitysvoimistelijat (practitioners of medical calisthenics) courses were established, in parallel with the Invalidisäätiö training. In 1965, this education was combined as part of the curriculum

of Helsinki-IV medical school and during the same decade, it was expanded to Lappeenranta, Tampere, Jyväskylä and Oulu. Physiotherapeutic education returned to the Universities in 1980, when the University of Jyväskylä launched a master's degree programme in physiotherapy education. The first temporary universities of applied sciences began in 1991. Currently in Finland, 15 universities of applied sciences offer bachelor-level degree programmes.

**FUTURE TRENDS IN PHYSIOTHERAPY**

Physiotherapy is part of the rehabilitation services which is undergoing a major reform process involving all health care and social welfare services available in Finland. The changes occurring in the general population and the functioning environment, such as the ageing of the population, the growth in socio-economic disparities and the increase in freedom of choice, will require new kinds of operational approaches from physiotherapists, for example, in domestic and remote rehabilitation, the promotion of the health, occupational well-being and the rehabilitation of older people.

At the same time, health statistics reveal that the proportion of the population with insufficient levels of physical activity is increasing across all age groups. Structures and practices must change, and a change in physiotherapy teaching will be required in order to meet future challenges. In the future, competence relating to the planning and evaluation of environmental competence will be more pronounced in the changing work of the physiotherapist. Today, multiculturalism and multinationalism are two phenomena encountered with increasing frequencies. In multicultural encounters, there is a need for an absence of prejudice, along with sensitivity and understanding, as well as interaction and work community skills.

At present, the increasingly complex life and work environment, as well as innovative technological solutions, such as those introduced by robotics, require that physiotherapists need to be creative and innovative, and to possess critical thinking and problem-solving skills. Communication, cooperation and interaction skills ensure the life-long development of competence. Professionalism requires flexibility, adaptation, self-direction, and an entrepreneurial attitude. The key factors in competence will be learning and innovation skills, information, media and technology skills, as well as skills related to career and life development.

In the future, the significance of an understanding of the effectiveness of rehabilitation and research evidence, both in training and work, will increase. Physiotherapy will be transformed because of technological developments. Currently, it is known that the amount of information available is expanding significantly because of digitalisation. Independent monitoring of health parameters, movement and functional ability as well as the maintenance of physical activity, will be emphasised as different devices and service platforms will increase and become part of everyday life. The monitoring of one's own health data and measurement results, as well as smart technology, will facilitate self-diagnosis, self-care and exercise in the future.

Healthcare will become increasingly individualised. Plans in the social and health care reform programmes to implement freedom of choice will give the client the opportunity to choose their health care services from a wider resource pool. This will represent a strengthening of the client's position and a need to improve services. Freedom of choice clearly impacts on businesses and third sector operators, as it diminishes the importance of the service sector and puts the client in the first place.

Digitalisation and developed technology will allow physiotherapy to be implemented based on test results reported by the customer utilising remote technology. The role of physiotherapists in instructing and motivating their clients will be emphasised with the development of technology used in physical therapy, as well as in the increase in

- In the future, the physiotherapeutic assessment of functioning should be based on uniform instructions, such as the TOMIA database (93%).
- Physiotherapy work should utilise research-based information more (agree = 95%).
- Continuing professional development is a precondition for development of physiotherapy (agree = 72%), for example, there should be greater cooperation between Universities of Applied Sciences and physiotherapists working with clients (agree = 77%).
- Future physiotherapy education should also consider the work carried out in multidisciplinary teams or project promoters/leaders (agree = 65%), and the implementation of various cooperative projects in the world of work (agree = 61%).
- In the future, the use of health and well-being technologies in physiotherapy should be increased (agree = 77%), more advantage should be taken of diverse learning environments (agree = 88%).
- In the future, physiotherapy should emphasise the promotion of the functioning of older people (agree = 61%).

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artificial intelligence. In addition, a physiotherapist will be able to compare the efficacy, effectiveness and cost-effectiveness of physiotherapy and rehabilitation with the use of different technologies.

For all those working in health care, it is important to appreciate the factors related to both effectiveness and cost-effectiveness. In a belt-tightening economic situation, physiotherapy services will have to be of even higher quality, even more effective, and they must still be produced cost-effectively. Physiotherapists will also require their own competence in innovative marketing and participation in social decision-making. One future mode of operation in social cost-saving could involve the transfer of tasks currently performed by physicians to physiotherapists.

Extended scope of practise to physiotherapy in relation to musculoskeletal problems has been underway in Finland for about ten years. Currently, this extended scope of practice is in use in 14 hospital districts in about 30 municipalities, with the programme continuing to expand. It has been found to improve access, allowing the client to receive assistance, to increase job satisfaction and to reduce costs. Digitalisation enables health care to move increasingly closer to the client so that he/she can participate more actively in the decision-making and information management. Technology aims not only to increase people's participation in society and social relationships but also to increase their levels of self-reliance and autonomy. In the future, digitalisation and technological solutions will further facilitate self-care and self-diagnosis, and allow early prevention and real-time treatment etc. This trend challenges physiotherapists to develop diverse customer-driven services that exploit today's technology as well as future advances.

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# APPENDIX 1

## The history of Physiotherapy and Physiotherapists in Finland

From physical education teacher training through nursing schools to universities of applied sciences

- 1908 Education in a university, in connection with physical education teacher training
- 1943 Education begins in Invalidisäätiö (literally, Foundation for Invalids)
- 1960s Education in nursing schools, specialist physiotherapist education begins
- 1980s Masters degree programme in Health Education and health care teacher training organized in the University of Jyväskylä
- 1990s Education provided in Universities of Applied Sciences, previous types of training terminated
- Master's degree programme training initiated

From Lääkitysvoimistelija to lääkintävoimistelijaksi and physiotherapists

- in the 1960s, under the title lääkintävoimistelija (literally, medical calisthenics practitioner)
- in the 1990s, under the title physiotherapy

From hospitals to health centres and the private sector

- 1960s hospitals
- 1970s health centres
- 1980s private sector

From passive treatment to the promotion of independent functioning
From temporary staff to entrepreneurs

- 2000s programme promoting direct interface in the public sector

From working alone to multi-professional networks
From disease-orientation to comprehensive functioning and prevention

- 1940s-50s war disabled and polio patients
- 1950s-60s neurological patients
- 1980s musculoskeletal problems
- 1990s lifestyle illnesses

# APPENDIX 2

## EQF level 6 competence from a physiotherapeutic professional perspective

**Knowledge:**
"advanced knowledge of a field of work or study, involving a critical understanding of theories and principles"

**The candidate shall:**

1. document advanced knowledge about theories, assessments and interventions for people with problems in movement and functioning
2. document knowledge about research ethics, different research designs, and qualitative and quantitative methods for data collection and analysis in physiotherapy
3. document critical understanding of theories and principles within the field of exercise and movement
4. document critical understanding of theories and principles within the field of manual therapies
5. document critical understanding of theories and principles within the field of physical modalities
6. document critical understanding of theories and principles within the field of cognitive behavioral therapies

**Skills:**
"advanced skills, demonstrating mastery and innovation, required to solve complex and predictable problems in a specialised field of work or study"

**The candidate shall:**

1. demonstrate advanced skills in reviewing documentation and communication of research in physiotherapy
2. demonstrate integrated knowledge from all main topics in the performance of clinical physiotherapy
3. demonstrate advanced communication skills in undertaking anamnestic information, in journal documentation and in team collaboration
4. demonstrate advanced skills in the selection and application of relevant examination instruments/techniques
5. demonstrate advanced skills in analyses of psychosocial-, cognitive-, emotional and physical issues related to the patients/clients dysfunction and situation
6. demonstrate advanced skills in implementing research- and clinical based interventions within the fields of promotion, prevention, treatment/intervention, habilitation and rehabilitation in physiotherapy
7. demonstrate advanced skills in the evaluation of the physiotherapy intervention in cooperation with patient/user/relatives
8. demonstrate advanced skills in formulating research questions, in developing research design, in selecting appropriate research methods, in analyzing collected and in communicating research results
9. demonstrate advanced skills in evaluating research-based knowledge together with practice knowledge, values and preferences
10. demonstrate advanced skills in ethical and professional behavior as a physiotherapist

**General competence :**
"manage complex technical or professional activities or projects, taking responsibility for decision-making in predictable work or study contexts; and take responsibility for managing professional development of individuals and groups".

**The candidate shall:**

1. discuss the terms 'evidence based' and 'clinically based' knowledge
2. argue about validity and reliability issues in qualitative and quantitative research
3. reflect on their need of further knowledge
4. take responsibility for developing their knowledge

# APPENDIX 3
## Laws and regulations

A physiotherapist is a licensed health care professional who has completed a physiotherapist's degree. The physiotherapist professional nomenclature may only be used, and the profession pursued, by someone who holds the qualification of physiotherapist. Their activities are supervised by the Regional State Administrative Agencies and the National Supervisory Authority for Welfare and Health VALIRA.

A physiotherapist is independently responsible for their work planning, implementation, assessment and development, taking into account the ethical and legal aspects, as well as the requirements of effectiveness, efficiency and economy.

Governing laws and regulations concerning the physiotherapist profession and functions:

1. The Constitution 11.6.1999/731
2. The Act on Health Care Professionals 559/1994
3. Health Care Act 1326/2010
4. Act on the Status and Rights of Patients 08.17.1992/785
5. Self-government Act (forthcoming)
6. Law concerning private health care 9.2.1990/152
7. Health Insurance Act 21.12.2004/1224
8. Health Care Act 21.12.2001/1383
9. Law on the Social Insurance Institution rehabilitation benefits and rehabilitation support 15.7.2005/566
10. The Employment Contracts Act of 26.1.2001/55 and other legislation concerning working life

# APPENDIX 4

## European preliminary proposals concerning physiotherapy and physiotherapists

The European Commission aims to facilitate the diverse determination between education and the world of work through the ESCO process (ESCO = European Skills, Competences, Qualifications and Occupations). The European organisation of physiotherapists WCPT-ER has defined the aforementioned process related to concepts of physiotherapy and physiotherapists. Descriptions have also been prepared for advanced physiotherapists and physiotherapist assistants, which correspond to the now obsolete term "condition practitioner" no longer available through the Finnish educational system. The definition of the work to be done by physiotherapist assistant emphasises that it is conducted under supervision or guided by a physiotherapist. In defining the advanced physiotherapist, emphasis has been placed, in turn, on the making of strategic decisions in complex, challenging and unexpected situations. The definitions are drafts and remain unpublished for the time being.

**Physiotherapy** is the health profession with expertise in movement and exercise prescription throughout the lifespan across the health spectrum. Physiotherapy involves specific interventions to individuals and populations where movement and function are, or may be, threatened by illness, ageing, injury, pain, disability, disease, disorder or environmental factors. Such interventions are designed and prescribed to develop, restore and maintain optimal health.

**Physiotherapy** is integral to all spheres of health and well-being such as promotion, prevention, habilitation and rehabilitation and encompasses physical, psychological, emotional and social factors. Physiotherapy involves the interaction of the physiotherapist with the client including his/her family, care givers and relevant other health professionals and communities
Physiotherapist Assistant - Physiotherapist assistants work under supervision, within defined contexts using agreed treatment protocols and procedures such as collecting client data and maintaining the equipment required in physiotherapy interventions. The overall responsibility is retained by the delegating professional.

**Physiotherapists** are autonomous health professionals who are responsible for developing, maintaining or restoring motor function and movement throughout the lifespan using evidence-based practice. They relieve pain and treat or prevent physical conditions associated with injury, disease or other impairments. Physiotherapists empower patients and their carers to manage the condition outside clinical settings. They work within their scope of practice and their professional Code of Conduct.

**Advanced Physiotherapist - Advanced physiotherapists** are highly specialist. They make complex decisions and manage risks in unpredictable contexts and within a defined area. They may focus on a specific area of clinical practice, education, research or professional management.