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GROUP ORIENTED PSYCHOSOMATIC PHYSIOTHERAPY
FRAME OF REFERENCE IN CHRONIC PAIN MANAGEMENT
FOR THE LONG-TERM UNEMPLOYED

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This thesis study describes and evaluates a pilot intervention based on psychosomatic physiotherapy and directed towards long-term unemployed individuals. In addition, suggestions for further development of the intervention are offered.

The study was based on action research methodology and mixed methods. The participants were recruited by the local municipal and employment service officials. Seven individuals having chronic pain participated in the pilot. Six of them were long-term unemployed: five women and one man. One of the participants represented the official partner in cooperation.

The description, the assessment and the suggestions for further development were conducted based on the qualitative and quantitative data gathered during the implementation. The qualitative data consisted of observations, one semi-structured interview and collected written feedback. The quantitative data consisted of data based on a questionnaire which was conducted as a panel design including pre- and post-intervention measurements without a control group.

The quantitative data did not yield statistically significant results. However, the used therapeutic exercises and activities seemed to improve the participants' body-awareness and awareness regarding own resources. Their repertoire of pain management tools increased as well. Peer-support and adapted exercises seemed to support the participants' ability to construct an understanding of biopsychosocial elements of pain experience and seemed to increase social trust by providing positive experiences of receiving and offering social support. In addition, physiotherapy instruction increased the understanding of the balance between biopsychosocial load and recovery in pain management. Finally, the pilot seemed to have a positive effect on the participants' social relations and acceptance of pain.

The therapeutic exercises supporting as well as instruction orientation utilizing peer-support and based on a psychosomatic frame of reference seemed to benefit the participants in pain management. However, the assessment showed that prolonged intervention might improve changes in pain behaviour. Exercises gradually exposing movement on various planes might work in a similar manner. Regarding pain management, the meaning of social trust and support of social participation were emphasized within this target group.

RYHMÄMUOTOISEN PSYKOFYYSISEN FYSIOTERAPIAN VIITEKEHYS PITKÄAIKAISTYÖTTÖMILLE SUUNNATUSSA KIVUN HALLINNAN KUNTOUTUKSESSA

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Opinnäytetyö on kuvaus pilotoidusta psykofyysisen fysioterapian viitekehukseen pohjautuvasta interventtiosta, jonka tavoitteena oli edesauttaa kroonista kipua kokevia pitkäaikaistyöttömiä kivun hallinnassa. Lisäksi työ tuottaa laadulliseen ja määrälliseen aineistoon pohjautuvan arvioinnin pilotoinnin vaikutuksista osallistujien kipukokeuksiin sekä ehdotuksia intervention edelleen kehittämiseksi.

Pilotointi toteutettiin toimintatutkimuksena. Osallistujat valikoituivat paikallisen työvoimatoimiston asiakkaista, viranomaisten arvioon perustuen. Interventioon osallistui seitsemän kroonisesta kivusta kärsivää henkilöä, joista kuusi oli pitkäaikaistyöttömiä: viisi naista ja yksi mies. Seitsemäs osallistuja oli yhteistyötahon edustaja.

Kvalitatiivinen aineisto koostui havainnoista, yhden osallistujan kanssa toteutetusta puolistrukturoidusta haastattelusta sekä osallistujilta kerätystä kirjallisesta palautteesta. Kvantitatiivinen aineisto pohjautui ennen ja jälkeen mittauksena ilman kontrolliryhmää toteutettuun kyselyyn. Muuttujat koottiin tieteellisesti testatuista kyselyistä.

Muun muassa pienen osallistujamäärän johdosta, kvantitatiivinen aineisto ei tuottanut tilastollisesti merkitseviä tuloksia. Kvalitatiivisen aineisto antaa kuitenkin viitteitä siitä, että psykofyysisen fysioterapian menetelmät lisäsivät osallistujien kehotietoisuutta sekä tietoisuutta omista voimavaroista. Osallistujien kivunhallintakeinojen repertuaari lisääntyi niin ikään. Vertaistuki sekä sovelletut harjoitteet auttoivat osallistujia rakentamaan ymmärrystä kivun biopsykososiaalisista ulottuvuuksista sekä näyttivät lisäävän sosiaalista luottamusta tarjoamalla positiivisia kokemuksia sosiaalisen tuen antamisesta ja vastaanottamisesta. Osallistujien ymmärrys omien voimavarojen ja kuormituksen tasapainottamisen merkityksestä kivun hallinnassa lisääntyi. Interventiolla oli myös positiivinen vaikutus osallisuuteen omassa lähipiirissä, ja osallistujat ottivat ensiaskeleita kohti kivun hyväksymistä.

Osallistavat, kehollisia liikkeitä ja kokemuksia hyödyntävät kuntouttavat harjoitteet, vertaistukeen nojautuva toteutustapa sekä psykofyysiseen fysioterapiaan pohjaava viitekehys auttoivat osallistujia eteenpäin kivun hallinnan prosessissa. Arviointi osoitti kuitenkin, että osallistujat saattaisivat hyötyä, mikäli tapaamiskertojen pituutta ja määrää lisätään. Niin ikään erilaiselle liikkeelle asteittain altistavien harjoitteiden lisääminen on olemassa olevan tutkimuksen sekä pilotoinnin valossa suositeltavaa. Sosiaalisen luottamuksen ja sosiaalisen osallisuuden tukemisen merkitys osana kivun hallintaa korostuivat tämän kohderyhmän kohdalla.

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1 INTRODUCTION

Chronic pain is a common phenomenon worldwide. According to estimates, a chronic ailment affects every fifth Finn. In the Finnish population survey, up to 35% suffered of the long-term, more than three months long pain, and 14% suffered from daily chronic pain. (Website of the Current Care Guidelines 2015.) Chronic pain strongly affects individual's psychological resources and ability to function.

According to pain researcher, docent and occupational health physician Helena Miranda, sickness leaves due to musculoskeletal disorders are too long. Too many people become permanently marginalized from working life when the sick leave is prolonged. Furthermore, long-term pain often does not improve during long sick leave. At home, an individual can become isolated, professional self-esteem can collapse and daily rhythm can be lost. On average, less than 10 percent can return to work after a year's sick leave. Opportunities for returning to work begin to deteriorate after six to eight weeks of sick leave. There is also a need for change in the attitudes of employers and employees. Supporting the continuation and reintegration into work is a shared moral duty of health care service and employers. However, it may not happen if a 100% condition is demanded at the work place. The employee may easily become passive at home if waiting for a complete recovery. In addition, depression may develop if full recovery does not happen. (Haavisto 2016.)

According to the National Action Plan for Treatment of Chronic Pain and Cancer Pain for 2017–2020 (Website of the Ministry of Social Affairs and Health 2017A) the cornerstones of chronic pain rehabilitation are comprehensive understanding of individual's life situations, pain education, improving functional capacity, behavioural and psychological therapies and appropriate medication. Patient education aims to reduce the burden of the condition, encourage self-care, and reduce the fear of pain with the help of training and other activities. The focus is on the patient's remaining functional capacity and what he/she can do with it. (Website of the Ministry of Social Affairs and Health 2017A.)

Recent advance in the understanding and the treatment of chronic pain has been fast, and it has expanded the perspectives regarding pain mechanisms and its treatment. Current studies (Kamper et al. 2015) indicate that a biopsychosocial frame of reference combined with a multidisciplinary approach has a focal role in the pain treatment. Although psychosomatic physiotherapy is inherently founded on a biopsychosocial frame of reference, available evidence based knowledge regarding its benefits in the pain treatment is limited. In addition, knowledge regarding the connection between pain experience and socioeconomic factors is scarce. While at the same time, polarization regarding health is notable in Finland (Karvonen, Martila, Kestinen & Junna 2017). Currently, one of the Finnish Government's key projects is seeking solutions to the employment- and health issues of those with partial work ability in order to promote re-employment regardless of decreased work ability (Website of the Ministry of Social Affairs and Health 2017, B).

This research report yields a description and evaluation of a pilot intervention regarding pain management and aimed at long-term unemployed individuals having chronic pain. The theoretical and clinical approach of the implementation were based on modern biopsychosocial understanding of pain and a psychosomatic physiotherapy frame of reference. The idea for the pilot intervention arose from the local municipal and employment service officials' needs to offer tailored services for the focus group. The implementation was conducted with and planned as a local and co-operative experiment between the local officials and the Satakunta University of Applied Science. This report serves as a bachelor thesis report for the degree of Bachelor of Health Care under the Physiotherapy degree programme. However, the yielded knowledge can be taken advantage of when further developing the services directed to unemployed individuals having chronic pain.

2 WHEN PAIN BECOMES CHRONIC

Pain is an unpleasant experience associated with tissue damage or the threat of it. Acute pain is a warning signal conveyed to the brain by sensory neurons. The painful stimulus might not be related to the seriousness of the injury or impairment. One might feel great pain due to minor tissue damage or irritation and vice versa. (Butler & Moseley 2013.) The brain makes an interpretation and perception of the danger message according to our previous pain experiences, sociological (such as culture, social aspects, identity and subjectivity, age, gender, environment, self-organization) and psychological characters (such as emotions, especially fear, stress, self-efficacy). Depending on this complex and multiphase process the delivered message might be interpreted as nociceptive pain or alternatively, not dangerous. In the latter case, the individual may not experience pain at all regardless the possible tissue damage. (Butler et al. 2013, 30-39.) Pain protects and teaches us to recognize our limitations; its purpose is to sustain life. The pain regulation system is based on the central nervous system's dynamic and plastic nature (brain neuroplasticity) referring to our brain's ability to change for better or worse at any age. Neuroplastic changes in the brain structure and function are not only a consequence of chronic pain but also involved in maintaining pain symptoms. Flexibility plays an important role in our brain development (or deterioration) and in shaping our distinct personalities. (Haanpää, Hagelberg, Hannonen, Liira, & Pohjolainen n.d., 4; Sibille, Bartsch, Reddy, Fillingim & Keil, 2016.)

2.1 Chronic pain

Acute pain is a warning signal, but when it prolongs our nervous system becomes sensitized to the pain sensation and we might feel pain even when there's no tissue damage related reason for it. Chronic pain is a global phenomenon. It is demanding to understand and treat. It is estimated that every fifth individual suffers from some form of chronic ailment. Aging usually worsen the problem. (Ojala 2015, 13.)

When pain has persisted from three to six months it has turned into chronic pain. Chronic pain is also called as *idiopathic pain*. Chronic pain may be related to degenerative diseases such as osteoarthritis, rheumatoid arthritis or diabetes. It may also be

associated with pain sensitizing changes in the spinal cord. These changes consist of an increased level of neural excitability and a central hypersensitivity resulting in a lowered pain threshold (*allodynia*) and stronger pain experiences (*hyperalgesia*). (Robertson & Ward & Low & Reed. 2006, 175; Butler & Moseley 2013, 72.) This is called *central sensitization* and it is made possible due to *brain plasticity or neuroplasticity*, which refers to the brain's predisposition to adapt and change as a result of interpreted nerve impulses and (pain) experiences (Nijs & Girbés & Lundberg & Malfiet & Sterling 2015, 216; Butler & Moseley 2013, 82-83).

Chronic pain has an influence on many sectors of an individual's everyday life. Pain is invisible to the eye, yet it may greatly affect the individual's activity and participation in daily living. Altogether chronic pain has a negative impact on the quality of life. Acute pain is local but when it becomes chronic the line between painful and non-painful area of the body starts to fade. Physical pain and mental suffering coalesce into one pain experience. (Ojala 2015, 13.)

2.2 Physiotherapeutic approach to chronic pain treatment

Pain rehabilitation is often organized and carried out as a multi-professional operational model that can be arranged in the form of an outpatient or in a rehabilitation facility. According to the Finnish National Action Plan of the Ministry of Social Affairs and Health (Website of the Ministry of Social Affairs and Health 2017A), the goals of pain rehabilitation are:

1. To support the rehabilitator to accept that all long-lasting pain cannot be cured.
2. To improve the individual's survival with pain in everyday life and working life, as well as to promote overall functioning.
3. To support the individual's own pain coping strategies.

Instead of relieving the actual pain, the focus in pain rehabilitation is on the ramifications of chronic pain. These ramifications include fear of pain, depression, impaired general and muscular tone, anxiety and decreased mobility of the joint system. (ibid.)

According to the national Current Care Guidelines in Finland (2017), non-pharmacological treatments are a priority in treating chronic pain. Medication is combined with other therapeutic methods, which is the foundation for pain management. Key non-pharmacological treatments include: exercise, therapeutic training (organized, systematic and controlled), cognitive-behavioural therapy, physical therapies, cold and thermal therapy and TNS. (Website of the Current Care Guidelines 2017.)

According to Nijs et al. (2015, 216) the main focus for treatment in acute pain is to reduce the nociceptive trigger. While in chronic musculoskeletal pain the focus of treatment is on changing the pain experience in parallel with reducing the nociceptive trigger. Nijs et al. (ibid.) state that the physiotherapist should think and treat beyond muscles and joints in the chronic pain related cases. Especially the physiotherapist should concentrate on strategies that aim to decrease the sensitivity of the central nervous system.

In order for this to happen the therapist should understand the role of movement related fear or kinesiophobia, mechanisms of central sensitization and the meaning of dialogue in patient education. A cognitive-behavioural approach should be applied when planning, guiding and dosing the exercises (Nijs & Girbés & Lundberg & Malfiet & Sterling 2015, 217). Regarding medication, The Finnish Current Care Guidelines (Website of the Current Care Guidelines 2015) emphasize periodic and paracetamol, anti-inflammatory analgesics or light opioids. Guidelines also mention that local tissue heating therapy might temporarily decrease pain. Moreover, TENS and acupuncture might have a positive effect on pain relief. Acupuncture might have a positive effect on functional ability as well. (ibid.) Improving the client's functional ability is the main aim of the treatment.

Regarding planning and instructing physical activities, Meeus et al. (2016, e5-e6) state that structured exercise is a safe and efficacious treatment for a multitude of chronic pain conditions. However, minimal dose of clinical benefits is unknown. Accumulated evidence hints that the medicating effect of exercise is caused by changes in central pain processing and changes in psychological factors, such as reduction of pain catastrophizing, fear of movement and injury and increase of self-efficacy. (Meeus &

Smeets & Cook & Beckwee 2016, e7.) Involvement to the rehabilitation is supported through an individual self-care program. According the Finnish Current Care Guidelines (2017) the main contents for such programs are the knowledge of pain and related factors, relaxation training, cognitive survival methods, problem-solving skills, communication skills, goal setting and encouraging the pursuit of physical activity. (Haanpää, Kauppila, Eklund, Granström, Hagelberg, Hannonen et al. 2008; Website of the Current Care Guidelines 2017)

According to Nijs et al. (2015) a protective movement related to pain memory typically acquired by the chronic pain clients may be overcome if these memories will be addressed during physical therapy. This can be done applying “the exposure without danger” –principle, meaning that the exercises are planned according to a progressive principle. Also, mental and social support and safety issues are emphasized, in addition to dialogue regarding anticipated and experienced danger and success.

Finally, it is assumed that psychosomatic physiotherapy emphasizing body awareness, acceptance and body and mind connection might help in improving the client’s functional ability and self-efficacy. However, evidence based knowledge regarding its effects is rare.

When treating chronic pain a continuous treatment relationship is important. The patient needs to be provided with enough information about one’s condition, drugless pain management guidance, encouragement and understanding. Because contradictory instructions may confuse the individual and undermine his/her trust in the treatment, it is important that the individual is treated and instructed by a health care professional having an education on modern pain science. (Haanpää et al. 2008, 2; Website of the Current Care Guidelines 2017.) Listening and constructing an understanding of the individual’s situation is one of the most important aspects when dealing with chronic pain. Pain is always an individual experience so it should be faced as one. However, the encouragement of distorted thoughts and behavioural patterns or previous incorrect knowledge about pain should be avoided. The individual’s commitment and role in rehabilitation is supported by a joint conversation where desired and realistic goals are defined. Individual’s behaviour and thoughts influence the attainment of goals. Therefore incoherence can cause contradiction that complicates the rehabilitation. Directing

attention further away from pain towards positive and motivating things as well as finding things that produce good feeling should be discussed and highlighted. (Haanpää et al. 2008, 2.)

2.3 The process and factors influencing chronic pain rehabilitation - individual's perspective

Chronic pain may have a diverse impact on the individual's quality of life. According to a qualitative study conducted by Franklin, Smith & Fowler (2016) the participants' daily life had changed significantly due to chronic pain. Some of the chores and activities had to be completely abandoned. Poor mobility, lack of sleep, fatigue, and difficulties in standing or sitting had a negative effect on daily life. Mornings were felt as particularly difficult and they had a significant impact on the whole day; the day's program was carefully planned to control the pain intensity. In addition to physical effects, psychological symptoms were identified and affected by the amount of pain if lacking adequate coping strategies. (ibid.) An individual might perform light or minimum activities that cause pain, but in more cognitively demanding tasks pain can complicate the performance through weakened concentration, attentiveness or memory. Still pain does not necessarily mean loss of function or cause disability, but depends on the interpretations and responds individual makes of pain. (Haanpää et al. 2008.)

In the same study mentioned above, some participants experienced isolation from society, reduced human dignity as well as inability to perform certain tasks due to pain. The lack of understanding or an invalidating attitude displayed by family members or friends increased conflicts. Pain intensity had a strong effect on the mood and consequently on the interaction with family and close relatives. (Franklin, Smith & Fowler 2016.) Isolation from society, experiences of disbelief and experiences of not succeeding in carrying out social roles expected by others or oneself may cause shame and stigma. Stigma can be defined as possessing an attribute that is interpreted as deeply discrediting, a sort of devalued identity. Stigma can be felt, such as by having a fear of becoming discriminated, or enacted, that is, experiencing actual discrimination. (Goffman 1963.) Although studies related to chronic pain and experienced shame and stigma are rare, there are studies showing that these experiences are interconnected

and should be taken into consideration when treating chronic pain. For example, in an Australian study Waugh & Byrne & Nicholas (2014) showed that 38% out of 92 participants with chronic pain experienced internalized stigma resulting a negative relationship with self-esteem and pain self-efficacy. In addition, a Swedish follow-up study (Gustafsson, Ekholm & Öhman 2004) describes how the implemented rehabilitation initiated a change process in which the participants remolded and renegotiated pain related shame experiences. With the help of exercises that are typically used in psychosomatic physiotherapy, the participants begun to construct a new self-image, body awareness and relationship with their environment. As a result, shame related experiences were surpassed and replaced by self-respect and raised self-esteem. Setting limits regarding own resources and learning new strategies for handling pain and other symptoms were the key factors in this change process.

According to Franklin & Smith & Fowler (2016), individuals with chronic pain could identify different strategies for pain management. The peer group also gave confidence and empowerment to live with pain without giving it control over one's life. Learning coping strategies regarding pain management was considered as one of the main offerings and meanings for rehabilitation. (Franklin, Smith & Fowler 2016.)

Studies (Franklin, Smith & Fowler 2016; Oosterhof, Dekker, Sloots & Bartels 2014, 6-7) have shown that care, kindness and interest shown by health care professionals as well as their listening skills and the knowledge and understanding regarding the symptoms and their effects influence strongly the commitment and the active role of the rehabilitator. Conversely, rushed behaviour, lacking understanding regarding the symptoms or their effects and inadequate listening affected negatively the interaction and relationship between the rehabilitator and health care professional. Frustration was caused if there were no answers to the questions that had arisen. In addition, transferring the rehabilitator from one expert to another caused frustration. Changes related to meetings were laborious and often the duration of the meetings were experienced as too short. (Franklin, Smith & Fowler 2016.) Franklin, Smith & Fowler (2016), describe also how the individual's expectations regarding the outcome of the rehabilitation changed during the pain management process. The initial goal of curing pain was transformed and replaced by the need to construct an understanding regarding pain and learning to coexistence with pain with the help of using a variety of coping strategies.

Although the intensity of pain was reported not being diminished, the participants experienced an improvement in coping skills which in turn improved the quality of life. Improved everyday life was important for all participants, and the most important element for achieving it was the learned coping strategies. (ibid.)

Constructing an understanding of one's pain is a comprehensive process including a variety of biopsychosocial elements which may also have links to one's life history. An individual may face a variety of emotions when creating and understanding of one's pain and its biopsychosocial face. Learning appropriate coping skills may include experiments, trials and errors and may involve life style changes. During this process, one may experience anger, accusation, and disappointment, and at the same time one needs to believe in patience and to better future. Accepting one's emotions and that one can influence the situation with the knowledge gained from trials and errors may give hope for the future. (Kinnunen 2016, 102-103.)

The adaptation phase included in the pain management process, may include varied phases. Individuals may face a situation in which they need to give up something meaningful for their identities. At an early stage, an individual may deny the pain entirely because it seems overwhelming to comprehend. In addition, it can increase pain and awaken helplessness, insecurity and even panic. Fear may follow other emotions and avoidance behaviour may develop as a consequence. From the bodily perspective, increased stiffness, superficial breathing, low-quality in movement or its flow develop in parallel with mind level experiences. Pain may impede and make it challenging for the individual to listen one's bodily messages. As a result, understanding one's pain and accepting it may become even more challenging for the individual. (Kinnunen 2016, 100-102.)

The whole body's consent plays an integral role in coping with pain. When the individual accepts that learning to manage and cope with pain is a process involving a variety of phases, biopsychosocial perspective and one's active role in learning new ways of thinking and acting, one also accepts the need for help and is ready to accept it. Pain is a subjective experience and cannot be unequivocally measured due to its comprehensiveness. The amount of experienced pain is different depending on the in-

dividual and his/her life situation. Our social relationships, life situation and expectations for the future, as well as the stage where the individual is in accepting pain and adapting to it, are factors that affect the pain experience. (Kinnunen 2016, 98-99.) The inner sense of integrity, that is, when an individual experiences that one is more than the sum of one's body and symptoms, helps in seeing the broader picture despite the chronic condition and pain and gives hope for healing. (Kinnunen 2016, 105.)

3 BODY-MIND INTERACTION IN CHRONIC PAIN

When pain becomes chronic it doesn't only plant its roots to the physiological part of an individual, but it also interacts with sociocultural and psychological factors. The multiple influences of long term pain on the conscious experience can be approached with the help of a biopsychosocial view. It treats the individual as an experiencing and sensing, unique individual, and attempts try to understand how physical functions, emotions, motivation, cognitions and social relationships are in a continuous and ever changing interaction with each other. In contrast, the biomedical model attempts to explain the diseases and their symptoms with biological concepts. (Ojala 2010, 5.) The purely biomedical approach loses the general view of the problem and the complexity of daily life which an individual may be facing. (Peters 2015.)

Negative emotions often follow chronic pain. Chronic pain tends to rule the conscious mind and in that way limit the individual's entire life. (Peters 2015; Vainio 2009, 4) Co-morbid depression can develop to as much as 50% of patients. Chronic pain and concurrent depressive symptoms can increase disability and pain experience. Anxiety can also have a negative influence by aggravating and maintaining pain and disability (Peters 2015). Pain can be experienced as an attack against both body and consciousness. (Vainio 2009, 79.)

One major risk increasing the possibility of chronic pain is pain catastrophizing. Researchers have shown that catastrophizing is one of the major predictors of pain becoming chronic. When catastrophizing one's pain, a person exaggerates negative cognitive- affective response to pain whether actual or anticipated. (Quartana, Campbell & Edwards 2009.)

3.1 Pain-related fear and avoidance behaviour

An avoidance behaviour is a result of learning and can, in prolonged period, lead to decrease in functional ability. According to the avoidance model an individual thinks that by avoiding painful situations one is able to prevent pain and potential additional

damage in which case, the avoidance behaviour serves as a positive feedback reinforcing itself. At the same time, however, it has a negative effect, reducing efficacy to cope with the situation. (Ojala 2010, 12.)

The purpose of a fear reaction is to increase the pain threshold and it is also believed to be a learned pattern. An individual has learned through experience to avoid situations that are experienced painful. As a result of avoidance, the individual's physical activity may decrease, functional inability may increase and depression may develop. (Ojala 2010, 11.)

Catastrophizing causes excessive fear of pain and disability that gradually extends to loss of physical activity due avoidance of physical activity that is expected to exacerbate the problem. Avoidance acts as a positive feedback that feeds itself, further reducing activity and weakening efficacy. Catastrophizing has been shown to predict kinesiophobia (fear of movement) when monitored for six months, although variables such as the original level of fear of movement were considered. Kinesiophobia can contribute to the development and maintenance of chronic pain and the underlying disability. (Koho 2015, 20.)

Relationship between kinesiophobia and disability is relatively high and neither pain intensity nor duration has been found to have mitigating effect. Long lasting avoidance-behaviour and physical inactivity have many negative effects that can lead to physical performance deterioration, limitations in social relationships, and disability and depression. (Koho 2015, 19-20; Ojala 2010, 11-12.)

A cross-sectional analysis (Costa, Maher, McAuley, Hancock & Smeets 2011, 219) found significant that pain self-efficacy was a more important variable compared to the fear of movement in mediating the relationship between pain and disability in chronic low back pain. Responsiveness to the improvement of self-efficacy believes was a change in relation to pain and disability during the 12 months. No similar relationship was observed with the fear of movement. Responsiveness may, in the light of the study, be a more important variable to understand the relationship between pain and disability. Although the fear of movement has gained much attention among scientists, it might be more fertile to focus on treatments that seek to promote pain self-

efficacy rather than pain-related fear management. (Costa, Maher, McAuley, Hancock & Smeets 2011, 218.)

Fear is a proactive emotional sensation to imminent threat. An ongoing circle were pain and avoidance maintain and reinforce the pain is due to adaptive behavioural learning. Although in case of chronic pain, biomedical pathology is usually no longer found, avoidance behaviour leads to distorted interpretation of pain that in the light of studied facts can be more disabling than pain itself. (Koho 2015, 19.)

3.2 Psychosomatic physiotherapy

Psychosomatic physiotherapy frame of reference aims to enhance the individual's comprehensive health. Perception of the individual is holistic where body and mind are seen as influencing and interacting with each other. Troubles of the mind can be conveyed through our bodies in movement or how we see or feel about our bodies. Feelings of the body can on the other hand influence our thoughts and emotions. Stress or an imminent situation may occur in the body through the autonomic nervous system or as a motor response to changes in motion and posture that may still cause, for example, a feeling of pain. However, learned emotional regulation can calm these emotionally triggered physiological responses and thereby promote the health and well-being of the individual. (Jaakkola 2009, 9; Website of the PSYFY ry 2017.)

Psychosomatic physiotherapy is based on experiential learning which help individuals to find solutions and everyday survival skills. Existing resources that support the individual's well-being and sense of control are highlighted. (Jaakkola 2009, 8-9.) In psychosomatic oriented physiotherapy the therapist uses several specific awareness-raising methods such as relaxation techniques, breathing and communication methods, (bio-) feedback, problem solving strategies and stress management. More psychosomatic physiotherapy methods are listed in the Table 1. The relationship between body language, body position, motion and gestures of the individual are explored. In addition, verbal language is analyzed. Together with the individual the balance between load support, tension and relaxation, and perception of illness and reality is discussed.

The method can be used on prolonged pain, anxiety, depression, when having problems in basic movements and body awareness. (Probst 2017; Website of the PSYFY ry 2017.)

Table 1. Physiotherapy methods used in psychosomatic physiotherapy according to Kauranen (2017)

THERAPEUTIC EXERCISES	MOVEMENT PATTERNS, QUALITY OF MOVEMENT AND APPRECIATION OF YOUR BODY
Motion exercises	peaceful harmonizing movement
Relaxation exercises	stress management
Respiratory exercises	right breathing technique and rhythm
Ergonomic exercises	identification and regulation of working postures and loads
Soft tissue treatment	body outlines and calming touch
Body awareness exercises	perception of the body in positions and movements
Functional exercises	body's connection to surface, gravity and load
Interaction-enhancing exercises	speechless body communication
Dance Therapy, Pilates, tai chi, deep stretching	body awareness enhancing physical exercises
Touch Therapy	increased body awareness
Mirror exercises	analysis of your own positions and movements
Mental image exercises	activating brain mirror cells
Guiding and counseling	body listening training

Perhaps the most used therapeutic methods used in psychosomatic physiotherapy is Roxendal's basic body awareness therapy (BBAT), Norwegian psycho motor physiotherapy, psycho-dynamic physiotherapy, Alexander technique and various relaxation methods. BBAT involves simple movement exercises done in sitting, laying, standing or walking. Other exercises can be pair exercises, own voice using exercises and soft tissue handling. All exercises combine the three essential elements of BBAT training: balance, free breathing and conscious presence. Other key factors in training include training of body contact, the centerline of the body, the efficiency of the movements and the perception of body's center of gravity and its relation to movement. The aim of these exercises is to increase the individual's body awareness, body control and self-awareness. During the exercises, the emphasis is on mindfulness in the body during different postures and movements. (Kauranen 2017, 523.)

Norwegian psycho motor physiotherapy is based on a method developed by an Austrian psychiatrist Wilhelm Reich, in which bodily symptoms such as muscular strains are linked to individual psychoanalysis. The method emphasizes the physical and psychological side and the cohesion produced by the reactions to various problems. The suppressed emotions of an individual, the pressures of the environment, and the mental distress appear as physical symptoms, such as holding breath or bent posture. Therapy methods can be massage, as well as active and passive treatment. The therapy aims at solving the emotional conflicts of the individual, releasing breathing and improving posture by reducing the muscular tension. (Kauranen 2017, 524.)

Psychodynamic physiotherapy is based on a general psychodynamic view that the individual's past (especially childhood) affects the individual's current world of experience. The method emphasizes the reflection of individual's past experiences on the body. The individual's subconscious mind contains emotions, memories, mental images, expectations, and attitudes that appear in the body's functional entirety. The active recognition and process of the subconscious thoughts also facilitates to open up physical body locks. Psychosomatic physiotherapy focuses on the normalization and overall treatment of muscle tightness, respiration, energy, postures and normalization of movements and comprehensive care, which increases the individual's ability to handle and understand the physical reactions and symptoms of the body. (ibid.)

Alexander's technique has been the basis for many of the methods mentioned above. In the technique, the physiotherapist guides the movement and thinking of the individual verbally and manually. Exercises are often performed in standing or in a rest position. The aim of the technique is to keep the individual aware of and to avoid harmful behaviour and motion habits and to prevent unnecessary muscular strain. (ibid.)

Various relaxation methods are also often used in therapy. Relaxation has both immediate and long-term effects on the body. Immediate effects include the relief of sympathetic nervous system irritation, resulting in lower blood pressure, heart and respiratory rate and oxygen consumption. In addition, brain electromagnetic activity is slowed down and endorphin is secreted in the body. Long-term effects include balancing autonomic nervous functions, decreasing anxiety and depression, and increasing

stress tolerance. In addition, the decrease in stress hormone concentrations promotes the function of immunological, hormonal and nervous systems. Relaxation on the psychological side stimulates learning, problem solving skills and sense of control. (Kauranen 2017, 524-525.)

Part of the relaxation methods are based on drawing attention to breathing and controlling it. By means of the methods, the aim is to change the superficial breathing into a wider breath that utilizes full pulmonary capacity. Deep breathing technic affects the brainstem's respiratory and circulatory control centers through the feedback system and lowers heart rate, blood pressure, and bodily tension. The physiotherapist can also facilitate the physical and mental relaxation through touch and lightweight stroking type of massage. (Kauranen 2017, 525.)

Physical exercise has been found to reduce anxiety, agitation and tension in the long run. As a physical training tool, mental imagery can be used. Mental image means an internal and psychological picture. Mental imagery training means taking part in physical activity using images. The individual creates ideas in the mind based on the real or imagined experiences and events he/she experiences. The effect of the training is based on the hypothesis that the practice loads and develops cognitive decision-making processes of skill and motion. It activates the same neurons and learning processes in the central nervous system as the actual physical training. As for the central nervous system, mental image training and physical training do not differ, physiological responses are mainly similar. (Kauranen 2017, 525.)

4 UNEMPLOYMENT AND WORK ABILITY

4.1 Unemployment and its connection to health and workability

Invalidity due to chronic pain causes very high costs for society. The cost of sickness allowances and disability pensions paid due to back pain alone amounted to EUR 469 million in 2013. The loss of production yield was multiple. Hence effective pain management can be economically beneficial. Significant savings can be obtained by investing in prevention and early rehabilitation and by reforming the operating models of basic services and specialist health care. (Website of the Ministry of Social Affairs and Health 2017A.)

Currently more than a half of the working-age population in Finland, approx. 1.9 million, suffer from a long-term illness or disability, which has developed during employment or unemployment. A round 600,000 of them have estimated that their condition affects their current work or their employability. (ibid.)

The connection between unemployment and health is complicated because unemployment has various effects on an individual's life and individuals may experience the situation in different ways. Several theories have been developed to explain the connection, and it seems that none of them alone manages to catch the diversity of the connection. These theories are summarized in the Table 2.

Table 2. Theories explaining the connection between unemployment and health (Janlert & Hammarström 2009)

THEORY	HOW THE CONNECTION BETWEEN UNEMPLOYMENT AND HEALTH IS EXPLAINED?
Economic deprivation model	Highlights uncertainty of economic livelihood as a potential cause of stress and ill-health.
Control models	Includes several different explanation models, of which the first set of explanations emphasize the lack of control of one's environment as a risk factor for health. The second group consists of stress-based control explanations highlighting the negative effects the low demand and low control situation may cause for individuals. A third perspective ex-

	plains that the way an individual interprets and explains unemployment affects health: if one sees that the locus of control is external, that is, the reason and solutions are located beyond one's own control, ill-health can develop.
Stress models	Unemployment causes psychosocial stimuli which in turn develops stress. These models also discuss the meaning of coping mechanisms and social support as moderating factors for stress reactions.
Social support models	Social networks promote health and buffer the impacts of unemployment while lack of social networks is seen as having immediate (negative) effects on health.
Models of latent functions	Work contributes to a variety of latent functions, such as: giving structure to a day, contributing to status and identity and providing shared experiences. Ill-health may develop due to lack of these latent functions.

Both international and Finnish studies have shown that long-term unemployed individuals may experience deficits in various aspects of well-being: physical, mental, emotional and social (Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008; Kortteinen & Tuomikoski). In addition, studies have also shown that unemployment has harmful effects on individuals' health (Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008). In Nordic countries, unemployed individuals have reported having more long-term illnesses and experience poorer health compared to employed individuals (Roos, Lahelma, Saastamoinen & Elstad 2005). There are also studies showing that unemployed individuals' health and functional capacity may fall faster compared to the employed individuals' capacity (Ross & Mirowsky 1995).

In Finland, a study made in 2005 (Holm, Jalava & Ylöstalo 2006) showed that even though the unemployed had lower work ability on average compared to the employed individuals, 60 per cent of the unemployed experienced having excellent or good work ability. However, repeatedly or long term unemployed individuals reported experiencing poorer work ability compared to the other unemployed (Ibid.; Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008, 15). This means that polarization can be seen between the disadvantaged and those who survive moderately or without cumulative disadvantages within the group of unemployed individuals.

Kortteinen and Tuomikoski (1998) discussed the possible polarization between the disadvantaged and moderately surviving unemployed individuals already in 1998 when they identified the following risk factors for cumulative disadvantages: a lower position in the labour market before unemployment, blue-collar work and cultural connection to working class, a low education level and previous experiences of unemployment. Moreover, poor social trust seemed to increase the risk for poorer workability and social marginalization. Kortteinen and Tuomikoski (1998, 168-169) highlight the meaning of social support which seemed to protect individuals from the negative effects of prolonged unemployment may have on health and workability. According to Kortteinen and Tuomikoski (Ibid.) social support means, firstly, value- and reciprocally oriented social support offering meaning for life and recognition as a valuable member of a local community and society. Secondly, an unemployed individual need financial social support. Both aspects of social support are needed to buffer the negative effects unemployment may have on individual's well-being and to help prevent possible development of a cumulative disadvantage.

Studies based on selection hypothesis have shown that poor health and especially poor mental health increase the probability of unemployment, and may increase the length of unemployment as well. (Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008, 17-20 and 65.) Being re-employed to a secure job increases the well-being, respectively (Ibid, 19).

Paid work and activity in the labour market are highly valued in Finnish culture. Participation in working life allow individuals to use and develop their skills and know-how, to participate in and create social relations, to participate in the society in addition to enabling livelihood. Not to have work means the uncertainty of livelihood and exclusion of many such things that inheres in adult's life.

The Finnish work culture emphasises the value of having guts (*sisu*) and resoluteness (*pärjääminen*) in the face of adversity. To have guts is a matter of honour while it is also profitable. Based on these values, to be unemployed may mean a failure, which in turn is a humiliating experience. (Kortteinen & Tuomikoski 1998, 24-25). Kortteinen and Tuomiokoski (1998) have created the concept of 'shame trap' (*häpeäansa*), to describe a complicated process between unemployment and the possibility of ill-

health. Highlighting resources availability, the study emphasizes various management strategies which might help the unemployment individuals to survive without ill-health. In our view, their explanation has the elements of all before mentioned models explaining the connection between unemployment and health: Also other studies have identified and discussed the shame caused by unemployment (Välilä 2008; Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008, 28).

In a situation of unemployment, an individual with a strong work-related identity may experience ambivalence when trying to create an understanding about the reasons behind one's exclusion from work community and working life. Experience of not having the guts nor being treated as equal: as "us" but an outsider, is humiliating and may make one question one's own self-esteem. If an individual has similar experiences of exclusion earlier in life, the experience might develop into shame. Shame is a complex emotional experience which is not connected to a certain act rather it encompasses the whole self. When one experiences shame, one might feel inadequate and dirty. Shame is a psychodynamic experience, and it encompasses both body and mind. It involves bodily expressions: flexed neck, forward rotated shoulders and downward gaze. Shame may cause somatic symptom disorders and ill-health, which in turn might further impede re-employment. Creating new values which are less work-centred, possibility to participate in reciprocal interaction in which one is both receiving social support, construct meaningful agency and possibility to cover living expenses are seen as the main factors helping the individual to survive from unemployment without ill-health. (Kortteinen & Tuomikoski 1998, 24-35).

Other studies have also found a negative connection between health and strong commitment to work-related values (Henriksson ym. 2003 in Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008, 28). Also negative expectations regarding unemployment seem to weaken health (Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008, 28).

4.2 Re-employment and interventions promoting it

Regarding re-employment, studies have shown that higher age may hinder re-employment thus explaining the reason why long-term unemployment is the most frequent among the 45-63-year-old individuals (Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008, 21). This has been explained with age-related stereotypes which may create sweeping and false conception regarding aged individual's workability, motivation, flexibility, interests regarding new technology and creativity. Moreover, institutional settings, such as the combination of severance payment and early retirement may also promote the selection of aged individuals in the case of redundancies. (Ibid.)

Evidence based knowledge regarding rehabilitative intervention promoting re-employment and unemployed individual's health and well-being is scarce. In general, it seems that rehabilitative interventions may improve unemployed individual's psychological and physical resources. Early-interventions seem to have most effective effects. Several studies highlight the positive meaning of multi-professional co-operation and the unemployed individual's active role during the rehabilitative intervention. (Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008, 47-59.)

Rehabilitative interventions targeted to individuals with partial work ability due to various musculoskeletal problems have shown that young age, high education, married status, stable social networks, self-confidence, no depression, low pain level, long work history and experience from the field are interconnected with higher probability of being re-employed. There are also studies hinting that psychosomatic aspects have greater meaning for re-employment than physical aspects or physical demands related to the work. (Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008, 43.)

Regarding chronic low back pain and interventions promoting workability, it seems that usually treatment decreases the pain level and improves ability to function, but to be efficient, the interventions should last over 100 hours. However, there is not enough

evidence based knowledge regarding which types of interventions have the most efficient effects on different types of individuals. (Heponiemi, Wahlström, Elovainio, Sinervo, Aalto & Keskimäki 2008, 50.)

There is an apparent need for national and international, evidence based studies regarding interventions promoting both re-employment of individuals with partial work-ability and health and well-being of unemployed individuals. Currently, the Ministry of Social Affairs and Health is implementing one of the current Finnish Government's key projects directed to seek solutions to improve the position of persons with partial work ability in the labour market (The website of the Ministry of Social Affairs and Health 2017 B).

5 AIMS AND OBJECTIVES

5.1 Evaluation, description and developmental suggestions based on the pilot

Maintaining and improving the work ability and career opportunities of those having partial or impaired work ability is one of the current Finnish Government's key projects. The Ministry of Social Affairs and Health (MSAH) is currently implementing "The key project Career opportunities for people with partial work ability" (OTE-key project) and funds several ongoing subprojects implemented around Finland. (Website of the Ministry of Social Affairs and Health 2017 B.)

Supporting well-being, employability and social inclusion of an unemployed individual experiencing chronic pain require multifaceted perspective and means. This research report yields a description and an evaluation of a pilot study based on an intervention aimed at long-term unemployed individuals having chronic pain. The theoretical and clinical approach of the implementation were based on modern biopsychosocial understanding of pain and a psychosomatic physiotherapy frame of reference. The intervention was implemented as group-based rehabilitation in Autumn 2016.

The main aim of the pilot was to study whether and how the group based psychosomatic physiotherapy would benefit the participants in pain management and improve their participation in the society. The aim can be divided into three objectives: firstly, to implement the group rehabilitation process related to pain management; secondly: to yield an evaluation of the intervention; thirdly: to utilize the yielded knowledge in developing suggestions for future development of the intervention.

This report serves as a bachelor thesis report related to the degree of Bachelor of Health Care under the physiotherapy degree programme. However, the pilot serves also as an example of a local co-operation and experiment, and the yielded knowledge and experience can be taken advantage of when developing new operating models and service paths to support well-being, employability and social inclusion of unemployed individuals with chronic pain.

The evaluation, description and creation of developmental suggestions were conducted and yielded with the help of action research methodology and mixed methods. The experiences and results of this study have already been taken advantage of in the preliminary plans regarding of a future joint-project between SAMK, Pori municipality, local employment administration and local subprojects related to the OTE-key project mentioned in the beginning of this chapter.

5.2 Research questions

The aim of this research report is to yield a description and an evaluation of the implemented pilot intervention. The research questions addressed are: Firstly, what kinds of shared or individually meaningful meanings do the participants' relate to the implemented rehabilitative process?; Secondly, what are the identified changes and stabilities related to pain experience?; Thirdly, what were the challenges and advantages of the pilot and how it could be developed to serve the target group's needs better? We use the collected qualitative data to answer the first question, while both qualitative and quantitative data is used to answer the second and the third question.

6 METHODOLOGY, METHODS AND INDICATORS

6.1 Action research

Consisting of a situational and context specific process with an aim to provide insights into a practical process and its development, we locate the methodological approach of this study into the tradition of action research. The purpose of action research is to generate knowledge as well as enhance learning and the development of practices through action (Koshy & Koshy & Waterman 2011, 4-5). It aims to improve status quo, the current situation by means of providing insights and different perspectives for both clients' and officials' or practitioners' problems. Assumption is that learning different perspectives helps all participants to construct an understanding about the situation and possible problems related to it, to make informed decisions and to act as agents (Koshy & Koshy & Waterman 2011, 9; Waterman 2013, 149-150).

Action research is based on an iterative cycle of action and reflection, and the aim is that this cycle is created together with the individuals related to the practices and social processes under the study. Collaboration and dialogue are the main means to enhance participation and thus the quality of the research as well. (Koshy & Koshy & Waterman 2011, 4-5.)

The aim of our bachelor thesis was to study, with the help of a pilot intervention, how a biopsychosocial oriented psychosomatic physiotherapy framework can be used to support the well-being of unemployed individuals having chronic pain. The instruction orientation was based on a postmodern constructive approach to instruction highlighting the meaning of dialogue and participation (Pekkari 2009, 102-105). The collected data was used to conduct a description of the implementation and an evaluation of the used physiotherapeutic means and their effects. Based on the description and evaluation, some suggestions and development ideas are presented as well.

6.2 Ontological and epistemological presumptions

The ontological presumption typical for action research is that the “reality” is treated as socially constructed. This means that various elements of reality, as well as how we interpret it, are seen as taking shape and evolving through social interaction. (Koshy & Koshy & Waterman 2011, 14.) Consequently, epistemological presumption is based on the same idea, hence knowledge is understood as socially constructed as well. This means that there is no such thing as objective truth, rather knowledge and truth are characterized by power relations and competition, bounded rationality and multiplicity as well as continuous creation and destruction. (Berger & Luckman 1884/1987.)

In practise the above mentioned means that the aim is to gather a rich data that allows the researcher to construct an understanding of the multitude of perspectives from various angles. In addition it means, that the “knowledge” yielded by the study represents only one situational interpretation of the truth, and that the researcher should also be aware of the various intrinsic limitations regarding data collection methods, analysing tools and researchers’ capacity to make interpretations. (Koshy & Koshy & Waterman 2011; Hammond & Wellington 2013, 4-7.)

6.3 Advantages and limitations of action research

All research traditions have advantages and limitations. In an ideal case, action research produces knowledge that enhances understanding of participants’ situations and experiences. This type of unique and specific knowledge of certain cases might be challenging to produce with the help of randomized controlled trials, for example (Koshy & Koshy & Waterman. 2011, 11). Moreover, action research may produce contextually relevant changes and innovations which in turn may have a positive effect on clients’ experiences and the outcome of health care interventions. Finally, in an ideal case, action research supports and encourages the participants to take responsibility for their own circumstances thus helping them to build sustainable agency. (Waterman 2013, 154-155.)

One of the main limitations regarding action research is linked to its various aims. The combination of research work, problem solving and development requires time, knowledge and practical skills, capacity to interact, be flexible, use creativity as well as bear uncertainty and changes. In addition, it is challenging to collect such data that provides insights into what changes and how, what learning has taken place and how, and finally, how to improve action and practices so that positive change is possible in the future as well. If the data is based on a small number of participants, as in our case, it is also demanding to interpret the data so that it helps to make findings generalizable. (Waterman 2013, 158.)

One major dilemma regarding action research is connected to the aim of empowerment. Empowerment means observing power relations and going outside ones comfort zone (Waterman 2013, 157-158). This in turn may cause frustration, dissatisfaction, surprises and even shock and explicit conflicts (Ibid.). Some individuals may not have resources and capacities enough to manage these wearing emotions and consequences. Moreover, some individuals may prefer the status quo rather than to challenge their own learning and surrounding social structures (Waterman 2013, 159-160). These facts place a great ethical and professional responsibility for the researcher. The researcher has to respect each individuals' autonomy, and this is what we did to the best of ours ability.

6.4 Ethical issues

Various ethical issues arise in the course of action research. The scientific community has created received ethical principles, obligating all researchers. These principles are: scientific integrity, meticulousness, transparency, scientific recognition and ethically sustainable means collecting data, carrying out research and evaluating it, intellectual freedom and public responsibility (Clarkeburn & Mustajoki 2007, 43-44). In addition to these basic received ethical principles, health care professional communities obliges their professionals to comply with certain specific and unconditional ethical guidelines and practices, aiming to ensure participants' rights and ethicality of the research (Hirsijärvi & Hurme 2008). In Finland, the Finnish Association of Physiotherapists has created ethical guidelines for physiotherapists, based on the ethical principles of

the World Confederation for Physical Therapy (WCPT). These guidelines emphasize confidentiality, respect for clients' human dignity and autonomy, compliance with regulations, responsibility for their work including the needed information gathering, adequate examination and participative goal setting, professional competence, practices and interaction, high-quality and evidence-based activities as well as socially, economically, environmentally sustainable action and practices. (Website of the Finnish Association of Physiotherapists 2014.)

At the beginning of the intervention, we introduced for the participants the idea, partners in cooperation and the main aim. We explained that the aim was to offer an arena for peer-support and various tools for managing pain. We highlighted that due to the individually experienced pain, all the introduced means and tools might not be suitable for everyone. We encouraged the participants to explore different means and share their experiences. Finally, we agreed upon shared rules, such as confidentiality which obligated all the participants, including us instructors/researchers. Along the way, we encouraged the participants to participate in and share their ideas for developing the intervention process to serve better their needs.

In addition to general ethical guidelines and principles, we reflected various practical and other arising ethical issues and questions with the help of virtue ethics and utilitarianism. Ethical reflection that is based on virtual ethics directs the focus on the researcher's own action, motivations and goals as well as to those consequences the research might have for the participants. For example, since one participant mentioned in the beginning that she/he had an earlier experience that participation in research projects has not yielded anything concrete to the participants, we decided to make a written summary of the presented exercises and posted it to all participants after the intervention. In addition we posted copies of their own questionnaire forms and made a short written summary of the main results. For us this meant an extra work which we had not planned beforehand, but we estimated that this would enhance the participants' learning process as well as possibly improve their experiences of participating in research projects.

Regarding our own actions, motivations and goals, we realised that we carried various roles during the process. Each of these roles required certain responsibilities as well as

knowledge and skills. Adequate preparation to each session, reading literature throughout the process, turning towards the teachers when needed, making sure that we had enough time to reflect, study and write the summaries and this research report, were all means to make sure that we had enough resources to carry all the roles successfully.

6.5 Mixed methods

Mixed methods is a methodology combining qualitative and quantitative methods, and thus two different ontological and epistemological traditions (Tashakkori & Teddlie 1998; Creswell & Plano Clark 2007). It has its root in 19th and the 20th century social research (Hesse-Biber 2010, 2).

Combining different methods can also be called triangulation. Denzin (1989) has identified four different types of triangulation, of which three apply to this study. First, our study is based on methodological triangulation: the use of two or more research methods or approaches in one study. This study applies across-triangulation since we use both qualitative and quantitative approaches in the same study. Secondly, this study is also based on researcher triangulation, since there have been two researchers conducting all the phases from the implementation of the intervention and data collection to analysis. This has made it possible to compare observations and interpretations. Finally, this study is also advancing theoretical triangulation in using several theoretical perspectives.

The purpose of combining methodologically different methods is that observing and analysing the studied phenomenon with various tools and from different perspectives is presumed to enhance the understanding of the phenomenon under study. It is also assumed that using different means to collect data helps to confirm the results and to improve reliability and validity. (Shih 1998, in Kurtin & Jaramazovic 2004, 117). Interpretation of inevitable discrepancies derived from different types of data is challenging, but finding out the possible explanations why the data does not immediately appear consistent, may again enhance the quality of the study (Whalley Hammel 2004, 141).

6.6 Challenges and limitations related to mixed methods

Combining methodologies from different paradigms, such as qualitative and quantitative studies, may be considered controversial. As Kurtin and Jaramazovic (2004, 12) mention, one could ask, shouldn't these opposing paradigms remain apart if they generate different kinds of knowledge. The answer to this question is that, methods should be selected on the grounds of the principle of appropriateness; how well the methods help to answer the research questions, not on grounds of epistemological considerations (Ibid.).

Qualitative methods yield data that can be used when finding answers to what and how –questions. They also shed light on the context-related issues. Data derived from qualitative research can be used to reaffirm, revise or expand particular theoretical frameworks, to expose limits to current theories and to identify previously unrecognized relationships among the elements of a phenomenon under study. It is claimed that sometimes therapists and health care providers may prioritize such rehabilitation practices and outcomes which may not be shared by the clients' preoccupations or perceptions. Incorporating clients' priorities and perspectives into the assessment of rehabilitative practices requires the use of qualitative data. (Whalley Hammel 2004, 132.) While with the help of quantitative methods it is possible to find out the cause-and-effect interactions, and to find an answer to why-questions. (Whalley Hammel 2004.)

6.7 The data: panel design, observation and semi-structured interview

The data collection methods used in this study were observation, semi-structured interview and written feedback based on qualitative methodology and a panel design including pre- and post-intervention measurements without control group based on quantitative methodology.

Observation was conducted during the intervention. Before the first intervention session we had constructed an observation frame (see the Appendix 1 which is in Finnish and with main observation results). We applied the ideas presented by Gordon et al.

2007 in the creation of the observation frame. In addition, we used both physiotherapeutic and sociological knowledge in the creation of it. The observation frame helped us to direct our focus to: A) Individual action and interaction such as, body posture, social role, participation and retreat; B) The elements of formal group, such as, what kinds of meanings the participants gave to formal documents, materials, formal rules, distribution of work regarding instruction and feedback during the meetings. In addition, we observed, who was speaking and what they said, what types of subjects seemed to interest the participants and when it seemed that the discussion began to fade or repeat itself.; C) The elements of informal interaction, such as, informal means to interact during and between the meetings, informal hierarchy regarding subjects and themes that were held as important, expressed differences between “us” and “them” and informal rules.; D) The meaning of physical space, such as the location and use of space and objects.

In practise, the flow of interaction and episodes was relatively fast, and required our comprehensive concentration since we were both instructing and observing at the same time. During the sessions, creating a trustful and participative interaction was our main goal. Hence we concentrate mainly on listening, asking questions and instructing exercises and memorized the observed with the help of some key words we wrote down during the meetings. After each session, we discussed our observations shortly and both of us wrote more detailed notes at home afterwards. Altogether the observation based data consisted of 15 pages of A4-size paper.

The participants were asked to share feedback regarding the intervention in various ways. They were offered to give written feedback whenever they wanted. An oral feedback session was organized in the middle and the end of the intervention process. Before the last oral feedback session, we asked the participants' permission to record the discussion, but because one of the participants was strongly against recording and others seemed not to be too excited either, we wanted to respect the participants' explicit and implicit wishes and did not record this discussion. However, the participants agreed that we could write notes during the discussion, and so we did. During the last meeting, the participants were also asked to write feedback regarding the used means, instructors' action, development ideas and their own impression regarding what the

participation in the intervention had given for them. All the feedback related data was included into the qualitative data.

Approximately one month after the intervention we conducted one semi-structured interview with one of the participants. This interview was conducted with one participant only due to restricted time resources. The interview was based on the questionnaire which was filled in the beginning and after the intervention. During the interview, the interviewee was asked how one explained and understood the observed changes between the first and second questionnaire. Permission to record the interview was asked, but since the interviewee preferred discussion without recording, the interview was not recorded. However, the interviewee agreed that notes were written during the interview and these notes were read aloud after the interview. Some additions and elaboration were made to the notes together with the interviewee after reading them. The interview notes were added into the qualitative data.

Finally, in order to be able to measure what kinds of effects the intervention had on the participants' pain related experiences, we conducted a questionnaire that was structured based on scientifically tested indicators.

6.8 The used indicators

Measuring changes in pain experience and pain behaviour is a challenging task due to diversity of pain and human life. Just measuring the intensity of the pain is not enough to construct an understanding of pain related experience and behaviour because in chronic pain the intensity and experience may vary depending on the day. Due to the pilot orientation in this study, we decided to use items from various pain related, scientifically tested questionnaires.

The questionnaire used in this study included 41 items (the questionnaire can be found in Finnish as the Appendix 2). In addition to background information, such as demographic information, pain history, pain medication and pain intensity, the questionnaire contained 24 assertions related to pain experience and pain behaviour. Following sci-

entifically tested indicators were used to create the questionnaire: Chronic pain acceptance questionnaire (CPAQ): nine items; Tampa Scale of kinesiophobia (TSK-FIN): seven items; Work Ability Index: three items.

One of the most commonly used chronic pain indicators in the world is the CPAQ (Chronic Pain Acceptance Questionnaire). CPAQ measures the emotional, cognitive, and functional factors related to chronic pain. CPAQ has proven to be a reliable and valid indicator to measure chronic pain acceptance in different languages. (Ojala 2010, 2 and 49.) The CPAQ contains items measuring pain related acceptance and individual activity. The utilized items from this questionnaire can be seen in the Table 3.

Table 3. The applied items from the CPAQ

ITEM NUMBER IN THE CPAQ	ASSERTIONS MEASURING PAIN RELATED ACCEPTANCE
4.	I would gladly sacrifice important things in my life to control this pain better.
7.	I need to concentrate on getting rid of my pain.
14.	Before I can make any serious plans, I must get some control over my pain.
17.	I avoid putting myself in situations where pain might increase.
16.	I will have better control over my life if I can control my negative thoughts about pain
18.	My worries and fears about what pain will do to me are true. Reworked to: I worry about the personal changes caused by pain.
ITEM NUMBER IN THE CPAQ	ASSERTIONS MEASURING INDIVIDUAL ACTIVITY
10.	Controlling pain is less important than other goals in my life.
15.	When my pain increases, I can still take care of my responsibilities.
19.	It's a relief to realize that I don't have to change my pain to get on with my life.

The TSK survey has been created to assess the fear of movement in individuals suffering from chronic musculoskeletal pain. Some studies have shown that this indicator can help to predict the disability followed by pain. In addition, it is used to investigate the relationship between pain behaviour's, distress, physical function and impairment.

(Koho 2015, 6; Damsgård, Fors, Anke & Røe, 2007.) In this study, we utilized seven items, one being a combination of two items. The utilized items can be seen in the Table 4.

Table 4. The applied items from the TSK survey

ITEM NUMBER IN THE TSK SURVEY	ASSERTIONS
2.	If I were to try to overcome it, my pain would increase.
5.	People aren't taking my medical condition seriously enough.
9.	I am afraid that I might injure myself accidentally.
10.	Simply being careful that I do not make any unnecessary movements is the safest thing I can do to prevent my pain from worsening.
12.	Although my condition is painful, I would be better off if I were physically active.
16.	Even though something is causing me a lot of pain, I don't think it's actually dangerous.
12. and 14.	13: Pain lets me know when to stop exercising so that I don't injure myself. 14: It's really not safe for a person with a condition like mine to be physically active. Combination: Pain limits my possibilities to be physically active.

We assessed the intervention's effect on the work ability with the help of Work ability index (WAI). WAI is a multidimensional indicator enabling the assessment of various aspects of work ability. It is widely used in measuring working aged individuals' workability both in Finland and internationally. According to international comparisons it is a valid and reliable instrument. However, there are discussions whether it is reliable enough when measuring younger individuals' workability and whether the subjective and objective measures should be kept apart when analysing the results. (Web-site of TOIMIA 2016.)

However, in order to function the best with unemployed individuals, the Finnish TOIMIA data-base recommends to apply the sections one and six form the index

(Vuokko, Juvonen-Posti & Kaukiainen 2012/2016, 6). Section one measures the current work ability compared with the lifetime best. Section six measures one's own prognosis of work ability in 2 years' time. Both measures are subjective. In order to measure the possible effects on psychological well-being, we used also the section seven from WAI. This section measures mental resources. The table 5 summarizes the applied items.

Table 5. The applied items from the WAI

ITEM NUMBER IN THE WAI	ASSERTIONS
1.	Current work ability compared with the lifetime best?
6.	Own prognosis of work ability two years from now?
7.	Have you recently being able to enjoy your regular daily activities? Have you recently been active and alert? Have you recently felt yourself to be full of hope for the future?

Finally, we noticed that items measuring individual's subjective impression of one's resources, own capacity within one's social environment and subjective impression of body-image were not included into the previous mentioned indicators. However, since we anticipated them to be involved with pain experience and because in our view these aspects can be seen as implicit elements of ICF, we decided to create additional items measuring above mentioned aspects. The additional items are presented in the Table 6.

Table 6. The applied additional items

ADDITIONAL ASSERTIONS INCLUDED INTO THE QUESTIONNAIRE
Regardless of the challenges related to pain, I find resources from myself.
I experience that my body and mind are separated from each other.
I use various means to relieve pain.
I am able to meet the expectations directed towards me by the members of my circle of acquaintances.

The preliminary version of the questionnaire was presented to the local officials from municipal- and employment administration, and based on their feedback, we decided

to use the Visual analogue Scale (VAS) instead of Likert Scale in scaling the responses. The VAS-scaling was seen as being more user friendly.

Regarding the qualitative data, we did not have any exact indicator directing the data collection, rather we wanted to emphasize the meaning of inductive reasoning, often used in the qualitative methodology. In practice this meant that instead of choosing a certain perspective to guide our observation, we aimed to construct the explanations mainly based on the patterns found from the data. However, after finding the patterns from the data we used the idea of International Classification of Functioning, Disability and Health (ICF) to further explain the identified differences between the qualitative and quantitative data.

6.9 The methods used in the data analysis

The gathered qualitative data was considered as one textual unit. The analysis was carried out with the help of a qualitative content analysis which can be defined as a research technique based on systematic and objective inference which is done according to specified characteristics which are identified from the data (Franzosi 2004/2010, 548-550; Tuomi & Sarajärvi 2002, 105-109).

The qualitative content analysis was based on two different phases: coding the data and conducting the effects matrixes based on coded data. The data was read through several times during each phase and the codes as well as the made interpretations were checked twice. Throughout the analysis process, researcher triangulation was taken advantage of. The yielded interpretations were discussed thoroughly between us two researchers. In addition, we exploited theoretical triangulation since we used both individually based explanations such as pain related fear and movement avoidance theories as well as socially orientated explanations, such as social isolation and shame, when constructing an understanding of the observations and interpretations explaining the connections between them.

The aim of the data coding is to systematize the data; it helps to find the relevant parts of the data and this is done with a systematic reading, by concentrating on certain

questions or meanings at a time. (Koshy & Koshy & Waterman 2011, 132-133). The data was coded based on the principles presented by Miles & Huberman (1984, 57) shown in the Table 6.

Table 6. The principles used in the coding phase of the qualitative content analysis

THE CODING PRINCIPLES
What was the setting or context?
What kinds of definitions participants gave for identified settings?
How did the participants think or orientated themselves, what were their perspectives?
How did the participants describe people and objects?
What kind of sequences, changes or flow was observed/identified/mentioned?
Where there some specific activities mentioned/observed?
Where some regularly occurring behaviour observed/mentioned?
What kinds of strategies were used to accomplish things?

During the coding phase of the analysis, the above-mentioned aspects consisted the units of analysis, meaning that at this point we did not connect them with pain experience or pain behaviour, rather we were interested in what was happening or taking shape in general. In other words, the analysis was inductive at this point.

The second phase of the qualitative analysis consisted of constructing an effects matrix of the data (Miles & Huberman 1984, 114; David & Sutton 2011, 358-259). The effect matrix helps to recognize possible changes in the data. The concept of effect in this type of analysis refers to outcomes of an explicit or at least an implicit predecessor, an intervening variable, which in our case is the intervention and the various instructional means and tools used during the intervention process. (Ibid.) Each session of the intervention consisted of various exercises and activities, that is, intervening variables, which we divided into following categories: therapeutic-, functional- and breathing exercises; activities related to social interaction; cognitive-behavioural exercises, and pain education. However, this categorization is broad and vacillating because some exercises had various elements of the above-mentioned categories. But in order to enable analysis, some categorization had to be constructed in order to make focusing possible.

We constructed the effect matrix analysis based on the above mentioned five different exercises/activity elements, and observed possible “recognizable effects” from the coded data. With “recognizable effects” we mean either positive or negative effects which could be found in the data at least three times during separated sessions or as mentioned/acted by three different participants. Identifying above mentioned recurrent actions or statements from the data refers to shared meanings between the participants or to an individually meaningful matter. Finally, we categorized the effects according to whether they were observed during the first or later half of the intervention. At this point, the analysis was mainly inductive. The Table 8 summarizes the analysis frame used when the effects matrixes were created.

Table 8. Analysis frame used in conducting effect matrixes

INTERVIENING VARIABLE	RECOGNIZABLE EFFECTS DURING THE FIRST HALF OF THE INTERVENTION	RECOGNIZABLE EFFECTS DURING THE FIRST HALF OF THE INTERVENTION
Therapeutic-, functional- and breathing exercises	Shared meanings between the participants or individually meaningful matter, that is, recurrent (at least three times) actions or statements identified from the data.	Shared meanings between the participants or individually meaningful matter, that is, recurrent (at least three times) actions or statements identified from the data.
Activities related to social interaction	Same as above	Same as above
Cognitive-behavioural exercises	Same as above	Same as above
Pain education	Same as above	Same as above

To collect the quantitative data, the participants (N=7) were asked to fill in the same questionnaire during the first and last meetings. This type of study design in which the data collection is repeated based on same measures and from the same sample at different points of time can be called as panel design. However, since the sample size was small, the analysis was restricted to non-parametric methods, which are qualitative in character.

The data was carefully fed to the SPSS24 in order to avoid mistakes which would be challenging to track later on. After the feeding of the material the values of the variables were checked by examining if the minimum and maximum values of every variable were correspond to the answer alternatives of the questionnaire. This was carried out, with Analyze and Descriptive statistics –commands.

The actual analysis was carried out with Wilcoxon Signed Rank Test, conducted with SPSS24. This test is suitable for small samples ($N= 3-5 < 30$) and pre- and post-intervention, two related sample designs. The test ranks the variable values and uses these ranks when constructing the analysis. This test is similar to t-test, except being a non-parametric version of it. (Metsämuuronen 2004, 100-104.)

Because one respondent had four omissions in the post-intervention survey, we excluded those variables from the analysis due to the already small sample size.

7 IMPLEMENTATION OF THE INTERVENTION

7.1 Background

The need for this pilot arose from local needs. The local municipal and employment service officials contacted the physiotherapy teachers in the Satakunta University of Applied Sciences which after the joint planning of the pilot begun. The implementation and the used questionnaire were planned in co-operation with the local officials from municipal administration and employment administration. The preliminary content for the pilot intervention was planned by Silja Jämsä in collaboration with physiotherapy teacher-instructors: Marjo Keckman and Maija Kangasperko as a part of her Bachelor thesis presented in September 2016 at Satakunta University of Applied Sciences. Keckman and Kangasperko were the teacher-instructors during the implementation and research process this thesis is about. The intervention plan and its implementation were based on psychosomatic physiotherapy frame of reference. In addition, an interactive Somebody® -instruction method was utilized both in the plan and its implementation. The Somebody® -method has been developed at Satakunta University of Applied Sciences. (Website of Somebody® 2017.) The intervention and its evaluation was implemented by physiotherapy students Heidi Kervinen and Hanna Peltonen.

Different backgrounds of the instructors supported one another and seamless co-operation and adaptation to different situations as well as open discussion between us instructors played a major role in the success of instruction. Hanna being a third year physiotherapy student was well familiarized with modern pain theory as well as therapeutic exercises and their physiotherapy based reasoning. While Heidi could take advantage of her previous education and work experience as a sociologist, specialized with working life research and with a firm psychosocial orientation, as well as of her individual experience of pain management process regarding migraine.

7.2 Selection of the participants

The target group consisted of the users of the local employment office services in the city of Pori. The participants were selected by the local municipal and employment

service officials. The local officials received one A4-size advertisement made by Jämsä (2016). In addition, some officials had participated in workplace meetings where the coming intervention was discussed and planned. Based on this information, the local officials recruited clients they thought would benefit from participation.

Eleven long-term unemployed individuals were selected for the intervention, of whom five women and one man finally participated in the intervention. In order to enable information flow between the intervention related experiences towards the local officials, the seventh regular participant was a staff member of one of the local partner organizations. This person was experiencing chronic pain as well.

All the participants (N=7), except the one partner representative, were long-term unemployed. However, the partner representative had an experience of being unemployed in the past. The age of the participants varied between 27-58 years old. All the participants seemed to be committed to the intervention: often times participants mentioned having been waiting for the next meeting already during the weekend. A few absences occurred due to sickness.

7.3 Structure of the intervention plan and its practical implementation

The implementation was based on a pre-planned frame planned by Jämsä (2016). The practical implementation of the preliminary content was shaped to its final form by the instructors to better answer participants' needs. According to our own perception the plan emphasized knowledge of pain mechanisms and affecting lifestyle factors, such as finding a balance between stress and loading factors and recovery. Much emphasis was placed on breathing and relaxation exercises as well as body awareness exercises. In practice this meant that the roles of natural body analgesics, the "natural movement" of the body, the activation of homunculus and the role of body boundaries, body parts and body support were emphasized in the exercises. In addition, identifying and creating own resources and creating future goals were aimed to reinforce self-efficacy, to support the participant to return to the desired activities by lowering the possible biopsychosocial- and lifestyle related barriers.

The pre-planned frame included the following themes: expression of emotions, breathing, body awareness, stress and pain, relaxation, interaction, mindfulness and self-image and resources. The group meetings were organized according to above mentioned themes so that one of the themes shaped the discussion and exercises during one meeting.

The implementation of the pilot consisted of ten group sessions of which eight group sessions focused around one of the above mentioned themes. The first meeting encompassed introduction to the rehabilitation process, a few exercises and the filling of the questionnaire forms. The last session included a group based feedback discussion, a few exercises and the filling of the same questionnaire form which was filled in the beginning of the intervention. The instructional orientation during the implementation was based on psychosomatic physiotherapy and postmodern social constructionism - orientated instruction, which emphasizes the meaning of participation and dialogue (Pekkari 2009, 102).

The group met 10 times approximately once a week on Mondays from September to December 2016. Each group session lasted one and a half hours apart from the first and the last meetings which lasted two hours. Mondays were found to be a good day for the group meetings. Most participants described that they were looking forward to Mondays because they experienced that the group meetings offered them energy for the rest of the week.

Approximately after the midpoint of the intervention the meetings were organized every second Monday. The idea behind this was to enable the participants to explore independently the presented exercises. However, changes in the regularity of the meetings brought some challenges both to the participants and us instructors. Gaps between the group meetings caused some confusion and extra work regarding the information flow. Furthermore, the participants preferred the meetings to be organized every week.

First group gatherings were held at the gym of the Satakunta University of applied sciences. One of the instructors waited for the participants in the hallway and showed the way in the beginning of the first three meetings. In addition, guide signs were put into the corridors to ease finding the location. The big gym space was divided into

smaller sections, to provide more privacy but still allowing enough space for everybody to concentrate on their selves. The gym proved to be restless due to other users. The noise and sounds coming outside interfered our activities requiring calmness and silence in order the participants to feel safe and relaxed. Hence we decided to change the space into a smaller classroom from the third group session on. The change was pre-discussed with the participants and seen as positive among the group. We also went to see the coming space together beforehand to make sure that everyone knew where we would be meeting in the future.

From the very beginning we group instructors, emphasized openness and trust among the group. The physical space and the group were supposed to reinforce self-reflection and support the participants to explore new means to manage pain. We instructors organized the space so that there were always therapy balls set in a circle for participants to sit on. We also had chairs but therapy balls were preferred so the chairs were left out. It was emphasized that there was no right or wrong way to be in the space (sitting, lying, standing, speaking or being silent). We also encouraged the participants to try different positions and there were mattresses, pillows and plints to enable this.

The order of addressed themes was slightly changed because of the early changes of group dynamics. Once everyone had arrived at the meeting, we usually began the session by discussing the day's topic and giving information on the subject. We also supported the participants to give their perspectives on the matter. Sometimes the session's topic was first familiarized through exercises followed by theme related discussion and reflection. Regarding the topic, our role as instructors was to give brief information, not a full lecture. We wanted to leave space for free thinking and sharing experiences around the topic. Through exploiting different learning channels such as explaining and experiencing with the help of pictures, words or by example, we wanted to give everybody the opportunity to internalize the day's topic in their own way.

The participants were given the opportunity to influence some of the content of the group gatherings. Opinions were asked along the way and a chance of giving anonymous feedback was also possible, but not used. During the fifth group meeting we had

a mid-point feedback discussion where participants had a chance to give overall feedback on the content and hopes regarding the future content. Another feedback discussion was held on the last meeting.

The reason for using a questionnaire as a means to assess the effect of the intervention was explained to the participants. The questionnaires were delivered during the first meeting and gathered back on the second meeting. When gathering the questionnaires, we also asked feedback regarding experiences when filling in the forms. The same questionnaire was filled in for the second time during the last meeting. At the same time, we asked for some written feedback. To motivate the participants to fill in the questionnaires we promised to send the forms for them with a short description of the results after the first analysis. And so we did. Each participant also got a small price after returning the questionnaire for the first time: a pedestrian safety reflector, which was current due to the dark season.

Preparation and execution of us instructors' division of work was equally distributed, so that while the other was more responsible for information transmission and leading the discussion, the other had the main responsibility in guiding the exercises. The roles were changed every week. As group instructors, we wanted to emphasize the meaning of support and encouragement for participation.

8 RESULTS FROM THE QUALITATIVE DATA

8.1 Therapeutic-, functional- and breathing exercises

The first effects matrix we made was detecting recognizable effects related to therapeutic-, functional- and breathing exercises. Usually, we started the sessions with sharing short reflections regarding the previous meeting and a short introduction to the theme of the day. After the discussion, we usually did activities combining functional exercises (such as finding the body's connection to the surface and searching alignment against gravity) and therapeutic exercises. Breathing exercises were done separately and combined with other exercises in all the sessions. We planned the sessions so that movement and breathing related exercises would cause some changes and variety between more discussions orientated ones. Due to the shortage of time, all the exercises introduced in the Jämsä's (2016) preliminary plan for the intervention were not implemented.

To have exercises produce bodily experiences quite soon at the beginning of the sessions proved to work well. Finding the connection to the surface and a balance between different body parts and gravity seemed to help the participants to concentrate on and orientate toward internal experiences. Breathing instructions during these exercises were often needed, because most of the participants were breathing with the upper part of their lungs, and learning diaphragmatic breathing seemed to be challenging for all. However, because we wanted to highlight the idea of finding and listening to one's own steady breathing rhythm, the instructions regarding breathing rhythm were kept relatively light.

All the presented activities were accepted by the participants, yet there was a need for individual adaptations. These adaptations included variations in body position and the type of the movement. For example, some exercises done in supine lying or including rotation or transitions caused pain experiences for a few participants and needed to be varied. Due to these movement related challenges it was essential to have different types of seating places, plints, mattresses and pillows to enable variety in postures. In

addition physiotherapeutic knowledge was needed to offer reasoned and suitable variations. From the beginning of the intervention, we had various sizes of therapy balls to be seated on, and the participants preferred them rather than normal chairs. To have different sizes of therapy balls was important since there were great differences in the participants' heights.

In the beginning, some had challenges in recognizing and describing bodily experiences, yet the awareness and capability to describe bodily experiences improved in all participants. At the beginning of the intervention, a few participants seemed to stray to other themes than bodily related experiences they were instructed to describe. Later on, expressing these experiences became more precise. One explanation for this could be that the participants learned how to concentrate and listen to own bodily experiences and also how to describe them. It might also be that in the beginning the participants did not feel themselves secure enough to share their bodily experiences to strangers. When they realised that they could trust the group and its individual members, they most probably were more open to share body and mind related expressions which always contain intimacy. In addition, participants helped and encouraged each other to recognize and describe bodily sensations and experiences. In addition to concrete help the participants sometimes used same concepts the others had used during previous sessions. Hence they created shared meanings regarding bodily expressions.

During the feed-back discussion at the mid-point of the intervention, the participants wanted us to play background music and to instruct relaxations more often, consequently these elements were increased slightly during the last sessions. Music seemed to help the participants to concentrate. In addition, one explanation for this wish could be that music might have affected the emotional and social experiences in a positive way. We did not notice to ask for the specific reason for the wish they presented.

During the final discussion and in the written feedback, several participants mentioned that they had tried some of the exercises at home and found them to be advantageous: *"I have received new knowledge regarding body awareness"* (Participant G, written feedback); *"Before this I did not have as many tools to control my pain"* (Participant C, written feedback). Participants also mentioned that constructing regular routine based on the exercises was challenging even though they had recognized that it would

benefit them. In order to support the adaptation of the exercises as daily practise, we decided to construct a written summary of most of the activities we carried out during the intervention and sent it to the participants.

In the beginning, some restrictions in reciprocal movements during gate was observed in all the participants. This was based on instructors' visual observation. As mentioned before, a few also had minor restrictions in rotation, extension and/or flexion direction movements. No great changes regarding these movement restrictions was observed during the intervention. This observation raises a question whether the intervention should have included more of therapeutic exercises that gradually expose the participants to explore and experience movements in all movement planes in different postures. Also exploring various qualitative aspects of the movement, such as elasticity and rhythm might be beneficial. However, we feel that this should be done in such a manner that respects the participants' wishes and enables the continuation of trust between the instructors and participants. In our view, exercises based on dance therapy, asahi or taichi might be advantageous because they allow creative, self-produced movement and parallel subtle instruction based on the rhythm of music, mental images and/or flow and lightness of the movement. In addition, all of the above mentioned activities support self-expression and agency. These activities also offer practical means to use to cope with pain. However, adding one more instructional tool means that the duration of the sessions should be extended by at least 15 minutes. Based on both written and oral feedback, the participants hoped the sessions to be slightly longer, so adding one element should meet the participants' wishes as well.

8.2 Activities related to social interaction

With activities related to social interaction we refer to activities and exercises that aimed to enhance self-expression and interaction among the participants. These activities included both verbal as well as body language and movement based communication. They also had elements of touch therapy. The activities included pair and group activities, and we instructors encouraged the participants to do the activities with family members and friends as well.

Before the first meeting with the group, we were anticipating that participating in a new group in a new environment might cause some emotional and social stress, and in order to help the participants to cope with the anticipated stress, we aimed at creating a convivial environment with the help of music, colours (we intentionally chose to use therapy balls with different colours) and by creating welcoming and friendly environment from the beginning. We also offered both oral and written information regarding the intervention and its structure and the venue. However, the participants mentioned that pre-intervention information was as too limited and consisted of some confusing information regarding the venue. The participants reckoned that some possibly interested individuals might have decided to opt out due to these reasons. They also suggested that using experience-based comments related to the pilot intervention might help to convince sceptical individuals to make the decision to participate in the intervention. Hence improving the marketing material is one important development tasks for the future. The marketing material should be tailored to the needs of actual participants and the local authorities who will direct and recruit the clients to the intervention. Adding pictures of the instructors and the venue to the marketing material might help in the construction of trust before the actual intervention begins.

From the beginning, it was obvious that the meaning of social trust was emphasized during the implementation. The participants shared experiences of various social situations in which their sense of social trust had become questioned. Distrust regarding the others and protection of self could more or less be observed from the participants' facial expressions and body language during the couple of the first meetings: facial expressions were slightly solemn and postures and movement were expressing protection with slightly tensed, flexed and withdrawn position and downward directed gaze.

From the first meeting on, we instructors aimed to engage the participants in the creation of social interaction. This was done in many ways, such as encouraging the participants to participate in the creation of rules, planning and decision making regarding the intervention process. Already in the first activity we faced an opportunity to build up social trust and shared experiences when one participant had challenges in creating a nickname for herself. We instructors asked others to help her, and soon the problem was solved and the group got an experience of successful team work. Through these types of small decisions highlighting participation and dialogue we as instructors

aimed to encourage the participants to support each other and create shared and meaningful meanings for peer-support.

Because 11 individuals had enrolled into the intervention, but only five was present on the first meeting, we decided to allow individuals to participate after the intervention had begun. Two more participants joined in on the second meeting, and based on the group decision, we decided that the group would be open for new members until the third meeting. However, no new members joined after the second meeting. During the feedback session in the mid-point of the intervention, some participants mentioned that in retrospect, they had thought that keeping the group open for new members until the third meeting was too long. They mentioned feeling relieved when the decision of closing the group was made, and actually we had observed a slightly more relaxed facial expression as well as body movements during the third meeting. It seemed that for the sake of confidentiality and trust it was essential to have small, closed and stable group. When the membership of the group became stronger, and when the participants learned to know the other members and us instructors better, it seemed that also the membership of this particular group became meaningful. The social participation was experienced as important and empowering: *“I wanted and had to come here today, even though walking is difficult and painful. I just needed to see you all and experience the activities.”* (Participant B, comment during the session); *“These sessions have been the highlight of the week, because I have a better feeling in my body and mind after this.”* (Participant A, oral feedback).

We instructors were surprised how easily and smoothly the implementation of functional pair and group activities happened. The participants were surprisingly flexible and brave to do pair and group exercises from the first meeting on. It seemed that interacting via body movements and exercises were experienced as easier and more meaningful compared with group-based discussion. Exercises also brought about positive facial and verbal expressions. Breathing also seemed to ease up. It seemed as if interacting via movement and touch helped to build up social trust and mutual understanding between the participants. In our view, movement and touch also served as a concrete and legitimated way to receive and offer social support: in pair and group based exercises one had a role as an actor and receiver in turns and sometimes in parallel. Reciprocal experiences of receiving and offering social support seemed to be

important since the participants had faced situations in which they had experienced uneven or dismissive allocation of social support. The used exercises seemed to offer an opportunity for meaningful: evenly distributed experience of social trust and support.

From the beginning the idea of peer-support was accepted and valued by the participants. However, conscious acts to support and cultivate it by us instructors seemed to be appreciated. There was an obvious need to support balanced interaction: some needed more encouragement to express their thoughts and ideas, and the conversation seemed to easily stray to other themes without subtle instruction. We highlighted that the meaning and offering of peer-support was dependent on the value we as a group would give for it. We also mentioned, that we as instructors were not able to define beforehand how they would benefit from the peer-support, but we mentioned, that by sharing and listening others experiences one might learn something.

In the beginning, the participants experienced that it was important to meet others experiencing similar things: *“It is great to see that I am not alone, rather there are others who are struggling with similar challenges”* (Participant G, comment on the 2nd meeting). Hence the meaning of peer-support was built upon the idea of creating a connection with a group of people who are “similar to me”.

One of the main evolved meanings regarding peer-group developed as the intervention went on. Sharing pain related experiences with others who were listening and seemed to understand seemed to legitimate individual pain experiences, and by doing so, these experiences became socially noticed and accepted. Instead of being only an internal experience they became socially constructed truth and thus easier to understand on an individual level as well: *“It is relieving to realise that I am not crazy, that it is possible to experience like this. Sometimes I feel that people think that I am crazy, that I imagine this.”* (Participant G, comment during the 6th meeting). In our view it seems, that especially for this particular group of long-term unemployed individuals having chronic pain a social legitimation for one’s pain was important. As mentioned, several of them had experienced downplay regarding their pain by family members, friends, relatives and/or social and health care professionals. Not to receive recognition or legitimation regarding one’s pain within the social community one is interacting with, seemed to

cause uncertainty of one's experiences. "Am I crazy?" – seems to be a relatively logical question if the community one lives in does not recognize and legitimate the experiences one is facing. A long-term unemployed individual has faced social exclusion (from the working life related communities) already once, perhaps several times. If this same person is also experiencing downplay regarding pain experiences by other meaningful communities, experiences of social isolation and marginalization may become relatively concrete. At the same time individual experiences of pain may become blurred because learning to understand and accept something that is not recognized by others demands resources and capacities that might be decreased due to the situation. The meaning of peer-support seemed to cover the gap between the individual experiences and the lack of social legitimation regarding them.

To conclude, the meaning of peer-support was not only to enable information and knowledge sharing regarding pain management means, as we instructors thought in the beginning, Rather and in parallel, it served to construct social legitimation of individually experienced pain and by so doing it also helped the participants to begin to construct an understanding of their own pain experiences. In addition, through the experiences of receiving and offering social support, the participants also rebuilt new, positive experiences regarding social trust and regarding their social roles. All in all, all the above mentioned elements helped to rebuild social trust, which obviously had been questioned earlier in the participants' history. *"I am going to miss these meetings. We have been laughing and sometimes even cried together and all these moments have been great."* (Participant B, comment in the last meeting). *"I have gotten support from all of you, and compassionate and understanding instruction."* (Participant C, comment in the last meeting).

In general, experiences of being heard without prejudice and of hearing others similar experiences were seen as empowering: *"I got more self-confidence to participate social events"* (Participant F, written feedback). *"Even though I wasn't able to participate for a few times due to sickness in my family, no one made me feel guilty of not being present, rather I was warmly welcomed and asked how I was doing. The instructors also send me encouraging SMS's."* (Participant D, comment in the last meeting).

The pair exercises as well as some home exercises encouraged the participants to interact with their family members and friends. Approximately half of the participants mentioned that they had tried the exercises home with someone else and most had discussed the intervention related themes with their family members. Based on these observations it can be said that minor strengthening between family relations had developed. In addition, discussing pain related experiences with family members seemed to improve self-confidence: *“It has always been so hard to ask for help, but now I was able to do that, at least a few times”* (Participant B, inter-view); *“I have tried some of the exercises with my children.”* (Participant E, comment on last meeting); *“It was so nice to hear positive feedback from my family members when I did this task (recognizing own resources and strengths) with them”* (Participant F, comment during the session). We also observed that some participants were meeting each other outside the formal sessions. Hence, new and improved social relations were built outside the formal intervention process as well.

A few participants had a need for informal discussions with us instructors outside the formal group meetings. These discussions were often related to experiences at home or with friends, and we got the feeling that their meaning was to give individually tailored support. These discussions happened either face-to-face before or after the formal sessions or via SMS. These informal discussions seemed to happen so often, especially after the mid-point of the intervention, that we made a conscious decision to reserve more time to prepare for the meetings, meaning that we were present in the classroom so early that we had time for both prepare the meetings and for these informal discussions. In our view, this observation means that some participants may need additional support in parallel with the group based intervention. Related to this, an additional arena for instruction might be beneficial, and an virtual arena, might work as well.

8.3 Cognitive-behavioural exercises

Psychosomatic physiotherapy encompasses elements based on a cognitive-behavioural approach in which the individual's cognitions or evaluations, emotions and behaviour are the focus of exercises. These exercises may however use movement and bodily

sensations as a means to approach and explore cognitions, emotions and behaviour, such as relaxation and breathing exercises, soft tissue treatment (calming touch) and various surface and alignment related exercises. In addition to movement and body sensations based exercises, we also used activities based on reflection, interaction and discussion. The aim of cognitive-behavioural exercises is to support in recognizing one's resources and capacities. In addition the aim is to recognize currently used coping strategies and to help to recognize which coping strategies would be constructive for one's short- and long-term wellbeing. The aim is also to increase self-efficacy and psychological flexibility or resilience by highlighting the meaning of acceptance and being present.

In the first meeting, we gave the participants a home task to ponder what their future goal(s) could be. We highlighted that the goal could be something relatively mundane and something that could be possible to do/experience next spring - within six months. We also mentioned that the idea of the goal was to bring something positive into their everyday life. We discussed this task at the following meeting, and it appeared that a few participants had difficulties in creating these goals. They just could not think anything that they could and would like to want to do or experience in the future. This was quite surprising to us instructors. Hence we were challenged right from the beginning to concentrate in listening what the participants were actually telling since we wanted to understand why the first task was experienced as difficult.

One of the reasons for the challenges in constructing future goals was that pain and its various forms appeared unpredictable: some days were good, some were possible to live with lowered expectations and standards, while on some days pain forced to stay at home and possibly in the bed. Both the unpredictability of own resources and shame related to decreased participation regarding housework, social network and working life (due to unemployment) seemed to cause an orientation where the time perspective shrank and the main focus was in surviving from today and the next night.

When one had a "good day" all the cumulated social responsibilities had to be taken care of while housework was done on tolerable days. Spending the "good day" efficiently and in a "responsible" way seemed to be a mean to compensate and repay the forced passivity during "bad days". In some cases limiting one's resources on good or

tolerable days was challenging due to family members who could explicitly or implicitly demand efficiency and responsibility. For example, one participant mentioned that she was expected to take care of grandchildren because she as an unemployed had time for that. Often own resources were used on what could be seen as the extreme limits. This in turn could cause increase in pain on next day. Soon a vicious circle of pain, insomnia and shame was developed, and focus was on surviving from today. Furthermore, shame regarding interpreted cumulated social debt made it very difficult to ask help when one was having a “bad day”. Appearing as weak and sad in front of others was also avoided. In general, accepting pain as a part of one’s life, seemed to be challenging especially because it had such complicated effects on one’s life, especially regarding social relationships and participation in the society.

It seemed that most of the participants had challenges in balancing between biopsychosocial load and recovery. One of the reasons was that valuing recovery seemed to be challenging for all the participants, especially during low-pain periods. One possible explanation could be that the value of having the guts (sisu) and the resoluteness in the face of adversity (pärjääminen) in addition to the matter of honour related to them - typical for Finnish culture, can actually be highlighted when an individual is excluded from the working life or when one’s resources have decreased due to pain. To be an unemployed in Finland is so shameful that individuals rather not discuss it – something we observed during the intervention as well. Even today when reconstructing and defeating various shame experiences with the help of policy of openness and storytelling is becoming more and more popular, unemployment is a phenomenon and experience of which we do not tend to see public confessions in the social media or impressive charity campaigns led by celebrities. Instead, individuals may try to defeat the shame by falling silent. Silence may have a form of isolation, which in turn may decrease the individual’s resources.

Another solution to make pain and unemployment related shame more bearable, is to overly exaggerate the values of having the guts; to survive independently, to be efficient and to be responsible no matter what comes ahead. By so doing an individual is trying to prove that based on one’s actions and characteristics one should be included into the working life rather than being unemployed; although being unemployed, at least one is an honourable unemployed. Yet, chronic pain and stubborn orientation of

having the guts might hinder the acceptance of pain and the need for both short- and long-term balance between biopsychosocial load and recovery. Some of the participants had challenges in this.

Based on our observation, accepting pain as part of one's life and learning to appreciate and to maintain the balance between biopsychosocial load and recovery seemed to be the most challenging task for the participants. However, exercises improving body- and self-awareness helped all the participants to take first steps toward the acceptance of pain as a part of their life. Relaxation and breathing exercises were considered as advantageous but difficult to remember to do when things were going well or when having an increase in pain. Learning new routines was experienced as challenging and creating new values emphasizing respect towards body and mind experiences meant a relatively comprehensive change in once orientation. Respecting individual body and mind experiences and especially short- and long-term balance between action and recovery can also be seen as minor resistance against the traditional values structuring working life and hence other aspects of the society as well. Resistance in turn demands resources and bravery and carrying the role of a rebellious may not be felt as empowering experience.

The participants were in different phases regarding the process of accepting pain. Hearing how others had managed to accepted pain as a part of one's life seemed to make the acceptance more realistic and legitimate for those who were not at this stage yet. We observed that all the participants took some steps toward the acceptance of pain because they seemed to be more honest about their situation and shared their private experiences to others. In the end, all the participants had constructed meaningful goals regarding the future as well: *"Next spring and summer, I want to learn to roller-skate. I have never tried it, but I want to try and learn that."* (A participant who had difficulties in finding any goal in the beginning). *"I learned to view myself more positively and to respect the recovery."* (Participant G, written feedback); *"I asked for help in cleaning, and I was proud of that for very a short time. It really helped me and I was in need of that. But still, I have not asked others to help me after that even though I might have needed that. It is just so difficult to ask for help and be helped."* (Participant B, Interview); *"I have gotten tips how to calm down and stimulate my body and*

mind, and how to manage pain. I have learned that calming down and resting is allowed.” (Participant C, oral feedback).

In the beginning describing own feelings was challenging for some participants. Some had challenges to show where the experienced emotions were felt in the body. Using cards with pictures illustrating emotions helped to discuss and describe emotions. We instructors spend time in finding suitable emotion cards for adults, and the participants seemed to like the minor humorous tone in the cards we finally ended up using. The cards were the Mahti-tunnekortit (web-site of the Kehitysvammaisten tukiliitto 2017), and we used the same pictures as reminders in the summary of the exercises we sent for the participants.

As mentioned before, sometimes the discussions seemed to travel to other subjects than the one we were starting with. It seemed that some participants had a great need to share their experiences, but sometimes it was slightly difficult to follow what the core message was. During the mid-point feedback session, some participants mentioned that digressing from the topic needed to be restricted. Together we decided that defining a time limit for each discussion might help to stay in the topic. This proved to be a good mean to limit discussion so that all still had an opportunity to share their thoughts. After reading the notes many times, we understood that the connecting link between all those small stories was to share experiences which were related to complicated and cumulated negative emotional experiences: usually these stories contained experiences of humiliation, exclusion, understating and shame. It seems that these stories served as a way to publicly reconstruct these negative experiences. By the end of the intervention, we did not observe digressing from the topic. In general, it seemed that recognizing and describing own feelings had improved: all participants shared their emotional experiences, some told they had discussed their experiences more openly with their family members or friends as well. *“This process gave me new means to relax and alleviate my anxiety.”* (Participant F, written feedback).

8.4 Pain education

Regarding pain education, the participants showed interest in short introductions (maximum of 10 minutes) to pain theory lead by us instructors. It seemed that pain education was working best if the participants were given an active role with the help of questions made by us. This allowed the participants to explore their individual experiences and to reflect new knowledge against those experiences. The shorter the instructor-led education the better the participants seemed to concentrate, follow and get something for themselves. *“I got new knowledge and deep understanding about pain.”* (Participant F, written feed-back); *“New things were interwoven well and smoothly into my experiences and earlier topics. This helped me to build up an understanding of pain which in turn has helped me to accept my pain.”* (Participant C, Written feed-back).

This type of evolving and participative process regarding pain education was demanding to manage for us, and required that we had studied the topic well beforehand. It also meant that we had to listen carefully to the participants in order to guide the discussion so that the possibilities to create new perspectives and to reflect own experiences was enabled and encouraged.

The new perspectives and concepts offered through pain education and in general an opportunity to compare own experiences and modern biopsychosocial knowledge regarding pain seemed to support the participants in the creation and construction of an understanding regarding own pain and its biopsychosocial aspects. With the help of the increased understanding regarding own pain, some participants also gained more encouragement to discuss these matters with family members and friends.

8.5 Conclusion of the results based on the qualitative data

As shown above, the qualitative analysis yielded a rich data and with its help of it we were able to construct a description of the pilot. As described above, a variety of meaningful and shared meanings regarding the intervention process and its effects regarding pain management were observed.

The activities and exercises conducted during the pilot seemed to help the participants in various ways. The participants got concrete means to try and explore when searching individually suitable means to cope with pain. The number of means was also increased with the help of peer-support.

In addition to concrete pain management means, the participants' body awareness seemed to increase in that sense, that expressing bodily sensations became more precise and rich. Self-awareness improved in that sense that participants mentioned paying more attention to the balance between biopsychosocial load and recovery. Also describing own emotions and their connection to bodily sensations improved.

Especially peer-support and the conducted movement and bodily sensation based exercises helped the participants to construct an understanding of biopsychosocial aspects regarding their individual pain experiences. Activities based on reciprocal social support and shared meanings regarding pain, isolation and shame related experiences helped to build up new and revitalized meanings and experiences regarding social trust and individual social roles. In addition, first steps regarding understanding and accepting pain and the meaning of balance between biopsychosocial load and recovery were taken during the intervention. New social relationships were constructed between the participants and some participants experienced improvement in their social relations. All the participants created meaningful future goals for the next six months as well. This helped the participants to pay attention to the quality of life regardless the pain.

However, the participants seemed to need more and prolonged support regarding pain acceptance, the adaptation of the introduced pain management means as daily practise as well as regarding a balanced view between biopsychosocial load and recovery.

9 RESULTS BASED ON THE QUANTITATIVE DATA

9.1 Results from the questionnaire

The results from the questionnaire can be seen in the Table 9.

Table 9. Results based on the questionnaire

INDICATOR	VARIABLES	MEAN/ ST. DEVIATION	Z-VALUE (N/TIES)	P- VALUE
Work ability (WAI) (VAS 0-10)	Current work ability compared with the lifetime best (pre)		0,135	0,893
	Current work ability compared with the lifetime best (post)			
	Own prognosis of work ability two years from now (pre)		-1	0,317
	Own prognosis of work ability two years from now (post)			
Psychological capacities (WAI) (VAS 0-4)	I have been able to enjoy my daily activities lately (pre)	2,21/ 1,02	-0,210 (N=7, Ties:1)	0,833
	I have been able to enjoy my daily activities lately (post)	2,11/ 0,96		
	I have been active and alert lately (pre)	2,01/ 1,26	-0,338 (N=7, Ties: 0)	0,735
	I have been active and alert lately (post)	1,94/ 1,16		
	I have felt myself to be full of hope for the future (pre)	2,09/ 1,27	-0,105 (N=7, Ties:1)	0,917
	I have felt myself to be full of hope for the future (post)	2,24/ 1,02		
Functional capacity (CPAQ) (VAS 0-4)	Controlling pain is less important than other goals in my life (pre)	1,79/ 1,15	-0,677 (N=7, Ties: 0)	0,498
	Controlling pain is less important than other goals in my life (post)	1,27/ 0,62		
	When my pain increases, I can still take care of my other responsibilities (pre)	2,61/ 0,94	-0,420 (N=7, Ties:1)	0,674
	When my pain increases, I can still take care of my other responsibilities (post)	2,53/ 0,68		
Pain acceptance	In order to manage pain, I abandon important things in my life (pre)	1,89/ 1,32	-0,315 (N=7, Ties:1)	0,752

(CPAQ) (VAS 0-4)	In order to manage pain, I abandon important things in my life (post)	1,94/ 1,38		
	I need to concentrate on getting rid of my pain (pre)	2,49/ 1,01	-0,338 (N=7, Ties: 0)	0,735
	I need to concentrate on getting rid of my pain (post)	1,94/ 1,39		
	Before I can make any serious plans, I have to get some control over my pain (pre)	2,27/ 1,44	-0,507 (N=7, Ties: 0)	0,612
	Before I can make any serious plans, I have to get some control over my pain (post)	2,64/ 1,03		
	I avoid putting myself in situations where pain might increase (pre)	3,04/ 0,69	-0,762 (N=7, Ties: 0)	0,446
	I avoid putting myself in situations where pain might increase (post)	2,90/ 0,86		
	I worry about the personal changes caused by pain (pre)	2,42/ 1,01	-1,153 (N=7, Ties:1)	0,249
	I worry about the personal changes caused by pain (post)	2,94/ 0,59		
Pain avoidance and movement related pain (TSK-FIN) (VAS 0-4)	If I were to try to overcome it, my pain would increase (pre)	1,46/ 0,83	-0,680 (N=7, Ties: 0)	0,497
	If I were to try to overcome it, my pain would increase (post)	1,52/ 0,82		
	People aren't taking my medical condition seriously enough (pre)	2,40/ 1,10	-0,424 (N=7, Ties: 0)	0,671
	People aren't taking my medical condition seriously enough (post)	2,34/ 0,90		
	I am afraid that I might injure myself accidentally (pre)	1,56/ 1,18	0,000 (N=7, Ties: 0)	1,0
	I am afraid that I might injure myself accidentally (post)	1,63/ 1,22		
	Being careful that I do not make any unnecessary movements is the safest thing I can do to prevent my pain from worsening (pre)	2,03/ 1,18	-1,109 (N=7, Ties: 0)	0,268
	Being careful that I do not make any unnecessary movements is the safest thing I can do to prevent my pain from worsening (post)	2,37/ 1,51		
	Although my condition is painful, I would be better off if I were physically active (pre)	2,71/ 0,62	-0,210 (N=7, Ties:1)	0,833
Although my condition is painful, I would be better off if I were physically active (post)	2,70/ 0,85			

	Even though something is causing me a lot of pain, I don't think it's actually dangerous (pre)	2,11/ 0,41	-0,169 (N=7, Ties: 0)	0,866
	Even though something is causing me a lot of pain, I don't think it's actually dangerous (post)	2,11/ 0,90		
	Pain limits my possibilities to be physically active (pre)	2,23/ 1,18	-1,183 (N=7, Ties: 0)	0,237
	Pain limits my possibilities to be physically active (post)	2,89/ 1,08		
Additional items	I have resources regardless the pain (pre)	2,50/ 1,23	-0,169 (N=7, Ties: 0)	0,866
	I have resources regardless the pain (post)	2,31/ 1,05		
	I use different means to control pain (pre)	2,76/ 1,16	-0,341 (N=7, Ties: 0)	0,733
	I use different means to control pain (post)	2,93/ 0,77		
	I meet social expectations (pre)	2,70/ 0,82	-1,014 (N=7, Ties: 0)	0,310
	I meet social expectations (post)	2,47/ 0,81		

Table 9 shows that there are no statistically significant changes between pre- and post-testing in any of the measured variables. The lowest P-value is 0,237, meaning that all the P-values presented in the table exceed the commonly held barrier, $P < 0.05$, regarding statistically significant clinical effectiveness. In other words, the P-values hint that the intervention did not deliver an effect regarding pain management.

Due to the multifaceted characteristics of chronic pain and its management, and because individuals having chronic pain have proven to be refractory to interventions, the result based on the questionnaire is not a surprise as such, rather it is in line with previous studies. (O'Connel, Moseley, McAuley, Wand & Herbert 2015, 1087.) O'Connel et al. (Ibid.) describe several reasons why altering the natural cause of any clinical condition is a difficult and complex challenge. Regarding the pilot study this report is about, we identified following possible explanations for the P-values.

Firstly, although the analysis was based on non-parametric methods, the number of participants (N=7) is very low and might have influenced the results. In addition, there was a one tie in various variables, meaning that a participant has not experienced any

difference between the pre- and post-values. All such observations are ruled out in the Wilcoxon Signed Rank Test –used this study, resulting in even smaller number of observations.

Secondly, whenever we study human beings and their experiences and behaviour there are many intervening effects that might influence the outcome. During the intervention period one of the participants fell down when walking on iced snow, and another participant had gastroenteritis which circulated through the whole family. In both cases, the participants told us already during the intervention, that their pain and insomnia increased. Moreover, there are various other real-world related, social, psychological, belief-system, participation and adherence related matters that may affect the results.

Thirdly, we should also consider, whether the used indicators actually measure such factors and elements that were meaningful to the participants' experience and understanding of pain and successful pain management. Regarding this there are two aspects to take into consideration: a) whether the indicators measure relevant aspects from the individual's perspective, b) whether the indicators are sensitive enough to recognize the minimum effect on which the individual is satisfied at and the variety of possible changes regarding this.

Fourthly, participants in this pilot study had different diagnoses: a few had low back pain, one had fibromyalgia and one had mainly knee and hip pain. This means that the N was not consisted of homogenous group.

Fifthly, the idea of pain management the intervention under study was based on leans heavily on self-reflection and learning to recognize own resources, capacities, current and possible suitable management strategies. Managing pain is an evolving learning process including different phases, which develop through experiments, mistakes, lapses and success. The adopted pain management strategies should also be updated whenever there are great changes in the individual's health condition, body functions and structure, activity, participation, environmental factors or personal factors. This learning and evolving process takes time and changes are more or less inherent part of that. Most probably this pilot intervention being only four months long might have been too short for producing long-term behavioural changes.

Finally, as mentioned earlier, trust and genuine encounter had a notable meaning for them due to decreased social trust. As is case in the qualitative research, trust plays an integral role in quantitative research as well. To build up trust takes time especially nowadays when several traditional norms regarding knowledge, expertise and professional ethics even have been questioned in various ways. It might be, that when filling in the questionnaires for the first time trust between the participants and us was still tested and evolving. While when filling in the questionnaires for the last time the participants knew already that they can trust on us as well as the other participants. This may have influenced the results so that the participants may have answered the questionnaire more honestly and with better awareness of their own pain experiences as well when filling in the questionnaire for the second time.

10 SUGGESTIONS FOR FURTHER DEVELOPMENT

10.1 Length and rhythm of the intervention

The first category of suggestions for further development of the presented implementation concern the length and rhythm of the intervention. Altering pain related behaviour takes time and may require comprehensive changes in one's belief-system, values in addition to daily routines. In accordance with earlier studies (Gustafsson, Ekholm & Öhman 2004), the results of this study suggest that for generating behaviour related, long-term changes, the pilot intervention seem to have been too short. Thus, prolonging both the duration of the sessions with 15 to 30 minutes and the length of the intervention might be beneficial. However, in order to enhance participants' learning a short break between the first and second intervention period might be beneficial.

In addition, we suggest a development of a mix of group and individual rehabilitation intervention so that the individual part of the rehabilitation would include a few individual meetings with a physiotherapist who could construct a tailored home exercise routine. A great emphasis should be placed on gradual exposal to movement on different planes and to maintain a balance between biopsychosocial load and recovery.

10.2 Content of the intervention

Secondly, we suggest minor changes into the content of the implemented intervention: as existing research (Nijs et al. 2015) suggests, the use of exercise gradually exposing to movements on different planes, help to treat pain related fear and movement avoidance. Incorporating these exercises with diaphragm breathing to activate parasympathetic nervous system and with music to increase motivation might be beneficial. Tai-chi, Asahi and dance are examples of such exercises. Adding these elements are the main reason for the need to prolong the duration of a single session.

In addition, thematic progress from the participants' current social environment and roles toward working life related social environment and future goals might support working life related self-efficacy and the re-employment.

10.3 Indicators to measure the outcomes of the intervention

Thirdly, according to our study it is legitimated to ask whether there is a need for such indicators which are sensitive enough to recognize that chronic pain experience is not fixed rather, based on the results in this study we claim that it resembles kaleidoscope. That is, the individual's pain experience may differ depending on the site of the pain, time, and involved biopsychosocial elements. In tandem, it is usually possible to recognize at least some patterns or similarities. However, there seems to be a need for measures which identify the variety of elements influencing the construction of pain experience and possible changes in this. Especially social elements, such as, the role of social support, social expectations and social trust seem to have minor role in the scientifically tested indicators used in this study.

In our view, the ICF-classification (Website of the World Health Organization 2017) of functioning, disability and health takes into consideration the variety of elements influencing the individual experience of functional limitation or disability. Nevertheless it seems, in our view, that when it comes to chronic pain there might be a need to construct such measures and indicators that correspond better with all the elements of the ICF, not only some parts. For one example, using Goal Attainment Scaling (GAS) (Sukula, S. & Vainiemi, K. 2017) might be worth experimenting and studying in the field of chronic pain rehabilitation. Hence we suggest that constructing GAS-goals reflecting the various elements in the ICF might serve both the participation, agency and motivation of the rehabilitator as well as research and developmental needs. GAS goals could be constructed during the individual meetings with the physiotherapist in parallel with the group rehabilitation process. The individual GAS-goals could be used as a background knowledge for the physiotherapists and other social and health care professionals instructing the group rehabilitation process. In Finland, the use of GAS is required in the rehabilitation provided by the Social Insurance Institution, Kela. Hence our suggestion would be in accordance with the policy of Kela as well.

11 CONCLUSION

The main aim of this study was to yield a description and an evaluation of the implemented pilot intervention based on a psychosomatic physiotherapy frame of reference and targeted to long-term unemployed individuals having chronic pain.

With the help of the gathered qualitative data, this paper yielded a description of the content of the intervention, the typical flow of the meetings, the implemented exercises and actions and the variety of the shared or individually meaningful meanings the participants expressed during the intervention. The yielded description can be taken advantage of when implementing interventions directed to similar target group and to similar purposes. It should, however, be taken in to consideration that the yielded information in this study is situational.

The gathered qualitative data enabled us to construct answers to the first research question regarding the intervention related meanings expressed by the participations. The study suggests that the participants highlighted functional, bodily and social aspects of the intervention and pain management. They seemed to value and benefit most from such exercises and actions which took advantage of or which were directed to improve their body related capacity and social relations. The value was expressed as positive facial expressions, positive verbal and written feedback and as the independent experiments of the exercises at home with family members and friends. While the reason for giving value was connected with experiences of improved body- and self-awareness, improvements in social support and observed improvement in social trust. On the other hand, instructor-led pain related education especially regarding acceptance, pain related fear and movement avoidance, seemed not to be valued as much as the above mentioned functional and practical activities. However, when the participants were supported to reflect their own experiences in relation to pain education perspectives, the participants seemed to value and benefit from the increased knowledge.

Exercises exploiting bodily communication, such as touch, differences between closeness and distance and pair-exercises, seemed to lower the threshold to participate, to offer and receive social support and to interact with others. Bodily experiences seemed

to function surprisingly well as bridging the participants' individual experiences with group experiences. In addition, they seemed to improve participants' own understanding of one's pain experience as well as they seemed to bridge them somewhat more firmly with their family members and friends.

The use of theories explaining pain from slightly different angles helped to construct an understanding regarding the observed diverse meanings and their interconnections. In our view, there was a need for pain theories emphasizing *behavioural explanations*, that is, the influence of negative or positive learning in the creation of chronic pain, such as catastrophizing, movement avoidance, pain related fear and the meaning of acceptance. Yet, these theories alone seemed to be inadequate, therefore raising a need for theories explaining pain as an *individual experience*, encompassing factors that are not dependent only on individual learning or interpretation, but which emphasize especially the meaning of social factors in the creation of chronic pain, such as isolation, shame, stigma as well as decreased social trust and social support. The qualitative data suggests, that *exploring individual pain experience* with the help of psychosomatic physiotherapy exercises and activities utilizing touch and social support offered by peer-participants and exploring individual resources with the help of family members and friends seemed to enhance participants body- and self-awareness and revitalized resources needed when *changing pain related behaviour*.

The limitations of the qualitative data and regarding interpretations are clear: due to the situational character of the generated knowledge, generalizations across this particular intervention cannot be made. Although, this is a problem of all kinds of inductive analysis. Notwithstanding the limitations related to situational knowledge, the use of researcher, theoretical and method triangulation in addition to systematic data gathering, coding, analysis and careful checking have aimed to improve reliability and validity. However, regardless of triangulation the qualitative data was slightly unbalanced because the observation data was emphasized and only one individual interview was conducted. Due to this fact, reliability and validity can be seen slightly decreased regarding the balance between objective and subjective data – individual's subjective view being less reflected.

The second aim of our study was to construct an evaluation of the pilot intervention. In addition to the first research question, the second research question regarding observed changes and stabilities related to participants' pain experiences helped us to meet the second aim. We used both quantitative and qualitative data to answer this question. The quantitative analysis conducted with the Wilcoxon Signed Rank Test showed that the intervention did not have scientifically significant effects on the participants' pain experience. Conversely, the qualitative data suggest that participants seemed to benefit from the intervention in various ways: they gained new pain management tools, body and self-awareness seemed to increase and understanding of biopsychosocial aspects of individual pain experience seemed to increase. Moreover, the peer-support aspects of the exercises and activities seemed to improve social trust and brought positive experiences related to social support. Finally, the intervention seemed to support the participants to take first steps towards accepting the pain and to construct strategies for maintaining a balance between biopsychosocial load and recovery. However, changes in the movement on different planes were not observed.

The discrepancies between the quantitative and qualitative data can be explained with following arguments. Firstly, the small N most probably influenced on the results in the quantitative part of the study. Secondly, as mentioned above, it seems that the duration of the intervention was too short for developing behavioural changes. In addition, the used indicators measured mainly behavioural changes while changes in body- and self-awareness as well as the social aspects of the pain experience were measured relatively lightly. Thirdly, exercises directed to gradual exposure to movements on various planes, had a relatively minor role in the implementation plan, which this pilot was based on. Fourthly, reliability and validity of the indicators were diminished due to the fact that none of the used set of indicators were applied as a whole in the used questionnaire. The decision to not to use the chosen indicators as a whole and as they are meant to be used was based on the explorative orientation of this pilot study. The aim was to construct knowledge from various perspectives not to concentrate only on one aspect of pain related experience or behaviour. Finally, situational factors play their role in quantitative research as well meaning that a variety of factors may influence and intervene in the measuring situation.

The third aim of the study was to offer suggestions regarding further development of similar type of intervention. The third research questions regarding the observed challenges and advantages of the pilot helped us to answer this question. Development ideas regarding the length and rhythm, content and measurement tools were presented.

Action research may produce contextually relevant changes which in turn may have a positive effect on clients' experiences and health care practices. Based on the presented data, it seems that peer-support encouraged the participants to take responsibility for their own circumstances thus helping them to take steps in building sustainable agency regarding pain management. In addition, the participants also expressed that they had benefitted from the rehabilitation. Hence, from the consequentialism perspective the pilot can be seen as ethically justified. This research report is also constructed in such a manner that the confidentiality and anonymity were protected, although the small number of participants occasionally made this challenging. As instructors, respecting the participants' dignity and autonomy had a great importance for us. We as researchers have relatively bounded possibilities to influence the future of this pilot. However, we hope that this report and our experience will be taken advantage of if similar interventions will be implemented in Finland in the future.

As a learning process, the combination of practical implementation, research work and development perspective has challenged us to develop our knowledge regarding chronic pain and its rehabilitation, the phenomenon of unemployment, psychosomatic physiotherapy as well as action research. In addition our practical skills regarding interaction observation and instruction, instruction of therapeutic exercises, conducting quantitative analysis for small data, conducting qualitative content analysis as well as writing research reports have increased during this process. In our view, we have managed to conduct the whole process quite well because the participants were satisfied and because we experience that we have learned more than we expected. However, in our view, information flow between us and the co-operative officials could have been more frequent. Due to the fact that we were doing this research in parallel with our studies and work and because the whole implementation and research process had some additional elements such as the creation of extra material for the participants, we did not unfortunately have time to report our progress more than a few times during this process.

Our mutual collaboration has been productive and rewarding throughout the implementation and research processes. Our strong backgrounds and interests regarding the subject have cultivated our inner motivation and enthusiasm, which, in our view, is reflected in this report as well. Smooth teamwork enabled us to be flexible, innovative as well as to reflect openly. The encountered challenges were discussed openly and solved rapidly. In our view, this was crucial for this type and scale of a project. In our view, smooth teamwork between us two was one key aspect when building trust between us instructors and participants.

Due to a broad topic and rich data, defining the object of this report was occasionally challenging. The discrepancies between the quantitative and qualitative data challenged us to redirect our focus and to find such theory based explanations which we were not anticipating at the beginning of this process. During the writing process much had to be cut off in order to clear the core content. In the evaluation of the quantitative material, a small sample size challenged us to learn a new statistical method which, in the future, serves us especially in the field of physiotherapy where the target group is often relatively small. This thesis process has supported our professional growth. The current references used in this report support the yielded results, which further strengthens the quality of work and the suitability of the piloted intervention.

12 DISCUSSION

The results of the presented study indicate that the psychosomatic physiotherapy frame of reference benefitted the participants in chronic pain management. It seems that one main reason for this was the diversity of the perspectives inherent in this frame of reference and hence the implemented pilot plan and instruction as well. In addition, the results show that physiotherapy expertise is needed when supporting the individuals to construct an understanding and strategies for maintaining a balance between biopsychosocial load and recovery in chronic pain management.

However, the study has shown that there is a need for such measurement tools that reflect the diversity of chronic pain experience. Pain behaviour such as pain related fear, movement avoidance and catastrophizing, is a part of pain experience. Directing pain rehabilitation and it's measuring to behaviour aspects only may exclude other important capacities and resources needed in pain management, such as social support and social trust. This study has shown that these social processes have a crucial role in pain management especially for unemployed individuals with chronic pain who may experience stigma, understating and social exclusion due to unemployment. The results also show that psychosomatic physiotherapy frame of reference can help to redefine health debilitating social experiences with the help of therapeutic exercises. However, there is a risk that these socially emphasized aspects of physiotherapy may be considered as secondary importance as long as only biological, psychological and cognitive explanations and perspectives are measured and thus highlighted.

In order to be able to support the self-efficacy regarding pain management, and the long-term life change it may require, as well as re-employment of this particular group, it is essential that all the social and health care as well as employment service officials are aware of firstly of how the frame of reference the official is leaning on explains the phenomena of chronic pain and unemployment: Does it reflect diversity or is it rather highlighting one perspective? A combination of perspectives seem to be needed. Secondly, enabling client involvement and dialogue throughout the rehabilitation process from goal setting to implementation and evaluation most probably help the client to create and increase the needed capacities and resources. The use of ICF and GAS

were presented as partial solutions to improve clients' involvement and a multidimensional view. However, more research is needed especially regarding the practical utilization of GAS in pain rehabilitation. Thirdly, the multi-professional implementation of the presented intervention would support the diversity of the perspectives and services.

Finally the study indicates that when trying to find solutions for complicated problems, such as chronic pain management among long-term unemployed individuals, local experiments implemented as a collaboration between different organizations and professionals and emphasizing the diversity of perspectives as well as interaction and genuine encountering have great potential to produce meaningful outcomes. The Finnish Government's decision to reform social and health services and regional government combined with the megatrends challenging work practices in all the fields of businesses, including rehabilitation, may increase the risk that local resources and specialties – challenges as well as potentialities – become obscured by the structural changes. On the other hand, the planned structural changes and the variety of ongoing development projects offer possibilities as well as new resources for local experiments.

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HAVAINNOINTIRUNKO

Tutkimuskohteen tarkastelutaso	Havainnoinnin kohde
<p>Yksilön toiminta ja vuorovaikutus Havainnoinnin tavoitteena on hahmottaa yksilön rooli, läsnäolo ja vaikutus ryhmässä.</p>	<p>Keho: asennot, ilmeet Usealla osallistujalla havaittavissa jäykkyyttä kehon liikkeissä, muutamalla osallistujalla haasteita kävelyssä, seisomisessa, makaamisessa ja/tai istumisessa, Ilmeet ovat vakavia intervention alussa, mutta ilmeikkyyttä lisääntyy ensimmäisen kolmanneksen jälkeen selvästi, jokaisella osallistujalla omanlaisensa tapa olla mukana: on tarkkailija, on kannustaja ja kokemusten jakaja, on hieman epäilevä, on hieman vetäytyjä, on hauskuuttaja, on ymmärtäjä ja on yksi näiden väliltä.</p>
	<p>Osallisuus: ääni paikassa ja hetkessä, läsnäolo ryhmäkerroilla Muutamat henkilöt hieman enemmän äänessä, kaikki ovat erittäin hyvin läsnä jokaisella harjoituskerralla, palautteen antaminen kasvokkain oli haasteellista, mutta sitä harjoitettiin useampaan kertaan.</p>
	<p>Vetäytyminen: hiljaisuus, paikka tilassa, poissaolo ryhmästä Porukka viihtyy yllättävän hyvin melko lähellä toisiaan, vetäytymistä lähinnä äänenkäytön osalta, muutamana kerran pari samaa henkilöä tarvitsevat erityisohjausta ja muokkauksia liikkeiden suhteen.</p>
<p>Virallinen, ääneen lausuttu ryhmä Havainnoinnin tavoitteena on pyrkiä tuottamaan aineistoa, joka mahdollistaa virallisen kulttuuristen ja sosiaalisten prosessien monipuolisen analysoinnin. Havainnoinnissa kiinnitetään huomiota myös siihen, millaisia merkityksiä toimijat antavat ääneen lausutulle, viralliselle</p>	<p>Dokumentit: tiedotteet, fläppitaululle kirjatut asiat, palautteet Useiden eri kanavien käyttäminen osoittautui tarpeelliseksi.</p>
	<p>Ryhmätapaamiset: tapaamisen kulku, käytetyt materiaalit, säännöt, istumajärjestykset, työnjako, palautteet Aloitukset aina ringistä, yhteistä keskustelua, sitten harjoitteita, taas vähän keskustelua ja jälleen harjoitteita. Usein ainakin yksi pari harjoite. Osoittautui hyväksi rytmiksi. Myös vetovastuun vaihtelu ohjaajien välillä osoittautui toimivaksi.</p>
<p>Kommunikointi: kuka puhuu ja mitä, mitkä aiheet nostattavat keskustelua, millaisiin aiheisiin keskustelu jää junnamaan/ei syty ollenkaan, läheisyyden ja etäisyyden vaikutus: omiin kokemuksiin liittyvät laadulliset kysymykset helpottivat keskustelua, oman kehon tuntemuksiin liittyvät kysy-</p>	

ryhmälle (sen tavoitteet, arvot, toiminta jne.).	mykset olivat haasteellisia: sanoja ei meinannut löytyä, erilaiset kommunikoinnin helpottajat, kuten tunnekortit auttoivat tässä.
	Tila: millaiset tilalliset ratkaisut edesauttavat vuorovaikutusta ja päinvastoin: pienempi rauhallinen tila erittäin tärkeä luottamuksellisuuden rakentumiselle
	Toiminta: toiminnalliset harjoitteet tärkeitä, tärkeää saada liikkua ja olla vapaasti. Silloin kun ei tehdä toiminnallista, tärkeää saada itselle soveltuvia vaihtoehtoja, parityöskentely onnistui yllättävän hyvin alusta lähtien. Välineiden käyttö, värien käyttö, innostivat. Tyynyt ja plintit tärkeitä, jotta jokaiselle saatiin hyvä asento. Plinttien käyttöön tarvittiin erityistä kannustamista.
	Emootioiden ilmaus: mikä on sallittua ja mikä ei, mikä nostattaa emootioita, mikä ei Lääkärien ja läheisten tokaisut nostattivat emootioita, työelämään liittyneet asiat vähän vaikeita keskustelunaiheita: onko toivo hiipunut?
	Keskustan ja marginaalin muodostuminen: mitä arvostetaan, mitä väheksytään arvostetaan aitoutta, aitoa kohtaamista, väheksytään ymmärtämättömyyttä, toisen ihmisen tuomitsemista
	Viralliset säännöt: miten tulisi toimia ei uusia tulokkaita mukaan, nopea ryhmäytyminen tärkeää (pidimme osallistumismahdollisuuden ehkä vähän liian pitkään auki: luottamus erittäin tärkeää!), luotiin toimintapa, joka auttoi pysymään asiassa (muutamilla henkilöillä kertomuksen fokus saattoi helposti karata, mutta polveilevat tarinat liittyivät usein häpeäkokemuksen lieventämiseen ja jakamisen kautta).
Informaali tai epävirallinen ryhmä Epävirallinen vuorovaikutus tapaamisissa ja niiden ulkopuolella	Kommunikaatiotavat ja paikat: pukuhuone, käytävät, muu? Kännäköviestit ohjaajille sekä tapaamiskertojen alusta ja lopusta varatut hetket ohjaajien kanssa näyttivät olevan tärkeitä muutaman henkilön kohdalla: tarve myös yksilöohjaukselle.
	Alakulttuurit: esim. hierarkkiseen kokemukseen tai demografiseen asemaan liittyvät jaetut merkitykset, käyttäytyminen, rituaalit, normit, arvot jne. Kokemus siitä, että työtön on kakkosluokan kansalainen, ja että työttömän terveys ja kipukokemus ovat vähemmän tärkeitä kuin työllisen.
	Emootioiden ilmaus: mikä on sallittua ja mikä ei, mikä nostattaa emootioita, mikä ei: Omien tunteiden ilmaisu sekä niiden kehollinen ankkuroiminen aluksi haastavaa.

	<p>Ryhmittymät: ”me ja muut” –asetelmat: lääkärit ja me; läheiset ja me: kertaantuneita kokemuksia siitä, ettei tule ymmärretyksi.</p>
	<p>Keskustan ja marginaalin muodostuminen: mitä arvostetaan, mitä väheksytään: arvostetaan aitoa kohtaamista ja väheksytään pinnallisuutta, ohittavaa kohtaamista. Osallistujilla erilaisia kokemuksia erityisesti jälkimmäisestä.</p>
	<p>Epäviralliset säännöt: Selkeät ja rutiininomaiset toimintatavat, ymmärtävä kohtaaminen osoittautuivat merkityksellisiksi.</p>
<p>Fyysinen tila Luo puitteet virallisen ja informaalin ryhmän käytännöille ja prosesseille. Kiinnitetään huomiota siihen, miten tila, liike, äänet, aika ja ruumiillisuus sääntelevät toimintaa ja vuorovaikutusta ryhmässä.</p>	<p>Koulurakennus ja tilat: sijainti, asettelu. Selkeys ja opasteet madalsivat kynnystä tulla ja osallistua.</p> <p>Tilojen käyttö: tilojen rajaaminen, kontrollin läheisyys, virallisen ja epävirallisen tilan välinen ero: pieni intiimi, viihtyisä tila osoittautui toimivammaksi kuin isosta jumppasalista lohkottu palanen</p> <p>Tilat välineistöineen, valaistuksineen, ilmanlaatuineen ja äänineen: jumppapallot osoittautuivat tärkeiksi: helppo olla, kannustaa pieneen liikkumiseen, helppo tilan muunneltavuus, eriväriset pallot loivat iloista tunnelmaa, erikoiset pallot olivat tärkeä olla, koska hyvin eripituisia henkilöitä, välineet innostivat silminnähdessä, musiikki osoittautui toimivaksi tunnelman tuottajaksi ja sitä myös toivottiin</p>

KUVIO 1. Kenttätyön havainnointimalli. Mallin rakentamisessa sovellettu Gordon ym. (2007, 43-45) ideoita.

Kipu Hallintaan -

ryhmä

Joulukuu 2016

Tämän kyselyn avulla pyrimme keräämään tietoa, joka auttaa meitä ohjaajia ymmärtämään paremmin tilannettanne ja arvioimaan Kipu Hallintaan -ryhmän antia. Lisäksi kysely saattaa myös toimia apuvälineenä oman tilanteen hahmottamisessa ja ajatusten selkiyttämisessä.

Kaikki antamanne tiedot käsitellään luottamuksellisina.

Taustatiedot:

Nimi: _____

Syntymävuosi: _____

Sukupuoli: mies _____ nainen _____

Mikä on koulutuksesi: _____

- Asutko:
- a) yksin _____
 - b) yksinhuoltajana lapsen / lasten kanssa _____
 - c) avo- / avioliitossa, jossa ei ole lapsia _____
 - d) avo- / avioliitossa, jossa on lapsi / lapsia _____
 - e) muu, mikä _____

Kuinka usein olet käyttänyt seuraavia lääkkeitä viimeisen kolmen kuukauden aikana?

Merkitse rasti käyttämäsi lääkemäärän kohdalle.

Lääke	En lainkaan	Muutaman ker- ran	Viikoit- tain	Päivit- täin
Kipulääkkeet				
Masennuslääkkeet				
Lihaksia rentouttavat lää- kkeet				
Unilääkkeet				
Jokin muu, Mikä? Kirjoita tähän:				

Kuinka usein olet harrastanut vapaa-ajan liikuntaa viimeisen kuuden kuukauden aikana vähintään puoli tuntia kerrallaan niin, että ainakin lievästi hengästyit ja hikoilet?

- a) 4-5 kertaa viikossa _____
- b) 2-3 kertaa viikossa _____
- c) kerran viikossa _____
- d) satunnaisesti _____
- e) en harrasta liikuntaa ollenkaan _____

Merkitse janalle pystyviiva (I) siihen kohtaan, joka mielestäsi kuvaa parhaiten kipusi voimakkuutta tällä hetkellä

ei kipua _____ pahin
mahdollinen kipu

Merkitse janalle pystyviivalla (I) se kivun määrä, jonka voisit hyväksyä eli se kivun määrä, jonka kanssa tulisit toimeen

ei kipua _____ pahin
mahdollinen kipu

Kuinka kauan sinulla on ollut jatkuvaa kipua?

- a) alle vuoden _____
- b) 1-2 vuotta _____
- c) 2-3 vuotta _____
- d) 3-4 vuotta _____
- e) 4-5 vuotta _____
- f) yli 5 vuotta _____

Onko kivussasi tapahtunut muutosta viimeisen kolmen kuukauden aikana?

- a) ei muutosta _____
- b) kyllä, muutos huonompaan suuntaan _____
- c) kyllä, muutos parempaan suuntaan _____

Numeroi viivalle tärkeysjärjestyksessä oman arviosi mukaan kolme kroonisen kipusi aiheuttajaa.

(Numero 1 on tärkein, numero 2 seuraavaksi tärkein ja numero 3 vähiten tärkein.)

- ___ tapaturma (esim. työtapaturma, liikennevahinko, urheiluvamma, pahoinpity)
 - ___ potilasvahinko (esim. leikkauksessa tullut vamma)
 - ___ istumatyö / yksipuoleiset työasennot
 - ___ raskas ruumiillinen työ
 - ___ perintötekijät
 - ___ ikääntymisen aiheuttamat muutokset kehossani (esim. ”kulumavaivat”)
 - ___ taustalla on toinen sairaus (esim. reuma, diabetes, nivelrikko), josta seurasi krooninen kipu
 - ___ en saanut riittävän ajoissa asianmukaista hoitoa
 - ___ en harrastanut riittävästi oikeanlaista liikuntaa
 - ___ olen ollut saamaton noudattamaan annettuja ohjeita
 - ___ kipuni on Luojan rangaistus minulle
 - ___ krooniselle kivulleni ei ole selitystä
 - ___ en tiedä
 - ___ jokin muu, mikä
-

Pelkäätkö kipua?

- a) en koskaan _____
- b) harvoin _____
- c) usein _____
- d) jatkuvasti _____
- e) en osaa sanoa _____

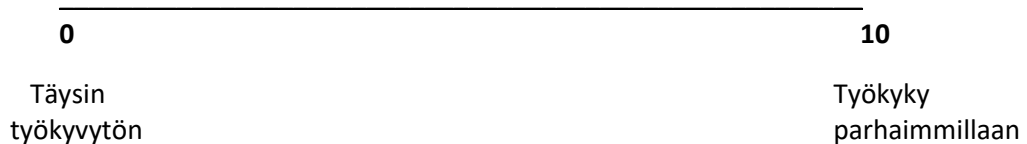
Oletko saanut tukea lähimmäisiltäsi kärsimääsi kipuun?

- a) en ollenkaan _____
- b) jonkin verran _____
- c) riittävästi _____
- d) en osaa sanoa _____

Oletko joutunut kivun takia luopumaan Sinulle tärkeistä asioista?

- a) en mistään _____
 - b) kyllä, muutamista asioista _____
 - c) kyllä, monesta tärkeästä asiasta _____
 - d) kyllä, lähes kaikista tärkeistä asioista _____
 - e) jos olet joutunut luopumaan jostakin, mikä on mielestäsi tärkein _____
-

Verrattuna elinaikaiseen parhaimpaan, mikä on työkykyysi tällä hetkellä? Merkitse janalle pystyviiva (|) mielestäsi sopivaan kohtaan, kun oletetaan, että työkyky on parhaimmillaan ollut kohdassa 10. Vastaavasti 0 tarkoittaa sitä, etten nykyisin pysty lainkaan työhön.



Uskotko olevasi työkykyinen kahden vuoden kuluttua?

- a) tuskin _____
- b) en ole varma _____
- c) melko varmasti _____

Väittämät

Seuraavaksi esitämme joukon väittämiä. Arvioi jokaisen väittämän todenmukaisuus omalla kohdallasi. Merkitse pystyviiva (|) janalle, kun 0 merkitsee "ei koskaan totta" ja 4 "aina totta".

1) Olen viimeaikoina kyennyt nauttimaan tavallisista päivittäisistä toimistani



2) Olen ollut viime aikoina toimielias ja vireä

0 _____ 4
Ei koskaan _____ Aina totta
totta

3) Olen viime aikoina tuntenut itseni toivorikkaaksi tulevaisuuden suhteen

0 _____ 4
Ei koskaan _____ Aina totta
totta

4) Löydän itsestäni voimavaroja kivun aiheuttamista haasteista huolimatta

0 _____ 4
Ei koskaan _____ Aina totta
totta

5) Jos yrittäisin selittää kivun, se vain pahenisi

0 _____ 4
Ei koskaan _____ Aina totta
totta

6) Terveystilaani ei oteta tarpeeksi vakavasti

0 _____ 4
Ei koskaan _____ Aina totta
totta

7) Pelkään, että loukkaan vahingossa itseni

0 _____ 4
Ei koskaan _____ Aina totta
totta

8) Estän kipua pahenemasta olemalla varovainen ja välttelemällä turhia liikkeitä

0 _____ 4
Ei koskaan _____ Aina totta
totta

9) Vaikka minulla on kipuja, oloni olisi parempi, jos olisin fyysisesti aktiivinen

0 _____ 4
Ei koskaan _____ Aina totta
totta

10) Vaikka jokin tuottaa minulle paljon kipua, en pidä sitä varsinaisesti vaarallisena

0 _____ 4
Ei koskaan _____ Aina totta
totta

11) Kipu rajoittaa mahdollisuuksiani harrastaa liikuntaa

0 _____ 4
Ei koskaan _____ Aina totta
totta

12) Luovun tärkeistä asioista elämässäni, jotta voin hallita kipuani paremmin

0 4
Ei koskaan Aina totta
totta

13) Minun tulee keskittyä pääsemään irti kivustani

0 4
Ei koskaan Aina totta
totta

14) Käytän erilaisia keinoja helpottaakseni kipua

0 4
Ei koskaan Aina totta
totta

15) Kivun hallinta on vähemmän tärkeää kuin muut tavoitteet elämässäni

0 4
Ei koskaan Aina totta
totta

16) Minulla on elämässäni mielekkäitä tavoitteita, jotka uskon saavuttavani

0 4
Ei koskaan Aina totta
totta

17) Ennen kuin voin tehdä tärkeitä suunnitelmia, minun täytyy saada kipuni jotenkin hallintaan

0 4
Ei koskaan Aina totta
totta

18) Kun kipuni kasvaa, huolehdin yhä velvollisuuksistani

0 4
Ei koskaan Aina totta
totta

19) Koen, että mieleni ja kehoni ovat erillään toisistaan

1 4
Ei koskaan Aina totta
totta

20) Huolehdin ja murehdin kivun minussa aikaansaamia asioita

0 4
Ei koskaan Aina totta
totta

21) Vältän joutumasta tilanteisiin, joissa kipuni saattaisi kasvaa

0 4
Ei koskaan Aina totta
totta

22) Hallitsen elämäni paremmin, jos voin hallita kielteisiä ajatuksiani kivusta

0 4
Ei koskaan Aina totta
totta

23) Pystyn suoriutumaan lähiyhteisöni minuun kohdistamista odotuksista

0 4
Ei koskaan Aina totta

24) On helpottavaa oivaltaa, että minun ei tarvitse muuttaa kipuani jatkaakseni elämäni

1 4
Ei koskaan Aina totta
totta

Lopuksi:

Mitä Kipu Haltuun –ryhmäprosessi on sinulle antanut?

Missä ohjaajat ovat mielestäsi onnistuneet?

Mitä asioita ohjaajat voisivat mielestäsi kehittää edelleen (esim. ohjaus/ ryhmäkertojen sisältö/ tiedotus/ organisointi)?

Osoitetietosi (postitamme ryhmäharjoitteet sekä kyselyyn liittyvän koosteen sinulle):

Kiitos vastauksistasi!