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ADAPTED PHYSICAL ACTIVITY IN REHABILITATING WORK
ACTIVITY FOR ADULTS WITH INTELLECTUAL DISABILITY –
CASE MONITUOTE

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The purpose of this thesis was to describe adapted physical activities (APA) offered for adults with intellectual disability in rehabilitating work activity and to spread information concerning the topic to colleagues in Finland as well as to those working abroad. The thesis is a part of research and development project of Satakunta University of Applied Sciences. The University works as an associate partner in EUSAPA-project which is a European level attempt to explore and develop adapted physical activities on its each application area.

According to EUSAPA preliminary survey work center Monituote from Pori, Western-Finland, was chosen as a case example due to the fact that it organizes adapted physical activities to its customers though none of the instructors has professional background of this field. In order to gather information concerning the work center as an organization and the activities contrived there, the staff of the work center was interviewed. Observation and photographing were utilized as a more concrete methods to get a more clear picture of the activities. A colorfull mixture of adapted physical activities organized for the adults with intellectual disability working in Monituote were described in written and photographs.

The adapted physical activities organized in Monituote were evaluated according to the three domains of learning and their goals. It revealed that Monituote is a good example of an organization which offers adapted physical activities to its customers, without a professional of this field.

In this thesis the physical activity supply in one rehabilitating work center was studied. Due to the lack of professional knowledge, some the adapted physical activities arranged in Monituote did not achieve all conceivable aims. For future thesis it would be beneficial to organize, for example, an APA-workshop day for the instructors of the centre.

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1 INTRODUCTION

In a research type of bachelor's thesis a research or clarification is prepared (Hakala 2004, 23-27). This work is a part of research and development project of Satakunta University of Applied Science. The premise in this thesis was a need for practical example describing adapted physical activities arranged for adults with intellectual disability in Finnish rehabilitation system.

When compared to the “normal population”, the functional ability and overall health are weaker among adults with intellectual disability. In addition, they have more sedentary life style. One of the underlying problems is inadequate physical activity supply for this particular group. It has been attested that physical exercise improves physical, mental and social function; hence physical activity is important for adults with intellectual disability. (Vesala, Numminen & Matikka 2008, 5-6.)

Adapted physical activity (APA) is an umbrella term for its three application areas: adapted sports and recreations, adapted physical education and adapted physical activities in rehabilitation (Heikinaro & Johansson 2007, 191). There has been an attempt to explore and develop APA on European level. A two year EUSAPA - project [European Standards in Adapted Physical Activities] has been created for this purpose in October 2008, consisting of 11 partner countries across the Europe, Finland being one of the cooperation countries. In addition, Satakunta University of Applied Sciences acts as an association partner in the project. (Website of EUSAPA 2008.)

The aim of the thesis is to describe adapted physical activities in rehabilitating work activity for adults with intellectual disability. In relation to the description, physical activities organized, are evaluated. A work center Monituote from Pori, Satakunta region, is used as a case example of rehabilitating work activity center. The work centre was chosen according to EUSAPA preliminary survey, carried out for the EUSAPA-project in spring 2010. The survey revealed a versatile supply of adapted physical activities arranged in Monituote.

The aim is to share information concerning the topic to all professionals working among adults with intellectual disability in Finland as well as in Europe. The adapted physical activities contrived in Monituote are described both written and as a photo book which will be produced for the work center use only. Matters such as what kind of adapted physical activities are offered, how often, how many participants are there, who are instructing the activities and what is the role of cooperation parties, are being explained more detailed.

Matters, such as intellectual disability and disability service system, adapted physical activity and rehabilitating work activity, are being discussed in the theoretical framework of the thesis. Results of the collected data are partly presented already in the theoretical framework.

2 INTELLECTUAL DISABILITY

In the literature the term intellectual disability (ID) has carried out multiple names, all emphasizing a certain dysfunction, such as mental retardation (emphasis on neurological dysfunction), learning disability (emphasis on difficulties in learning) and intellectual disability (emphasis on primary dysfunctions) (Patja 2002,13). In this study the term adult with intellectual disability is utilized for the reason that it focuses on cognitive, adaptive and behavioural manifestations.

ID is a multiform concept to describe extensive insufficiency of functional ability. The term is the upper most concept to describe issues which lead to learning problems and hardship in maintenance of active daily living (Seppälä 2008, 507). Finnish Intellectually disabled special care Act (519/1997) states that a person with intellectual disability is someone whose development is prevented or disturbed because of sickness, fault or trauma in congenital or growth and is not qualified to receive the needed services by virtue of any other law (FINLEX).

According to the American Association on Intellectual and Developmental Disabilities [AAIDD] ID is defined as a following way: “Intellectual disability is a disability characterized by significant limitations both in intellectual functioning and in adaptive behaviour, which covers many everyday social and practical skills. This disability originates before the age of 18”. (Website of AAIDD 2009.)

Intellectual functioning implicates to a person’s overall mental performance. As the mental performance of an individual is impaired, the limitations of intellectual functioning become evident as confined to total capacity. There can be seen problems in drawing conclusions based on observation made on oneself and the environment; problem solving, implying to the ability to understand what is happening in a situation and how to react in order to survive; understanding complex

context and learning from experience, requiring ability to memorize several issues simultaneously and ability to memorize important learning experiences; planning own action which requires concentration and capability to stay in the matter and ability to separate essential and unessential matters. (Seppälä 2008, 507.)

Developmental disorder in the nervous system, uppermost damage into the brain, contributes to incomplete intellectual function. Slowness and troublesome of mental performance depend on the disability level. According to WHO intellectual disability is classified in different levels in accordance with IQ as following: mild disability IQ 70-50, moderate disability IQ 49-35, severe disability IQ 34-20 and profound disability IQ under 20. Mental performance or lack of it is estimated by standardised psychological tests which can be completed with scales measuring social adaptation. (Patja 2001, 15.)

Besides the impairment of intellectual functioning, AAIDDs intellectual disability definition also notifies adaptive skills. Limitations of the adaptive skills have an impact in ability to survive everyday living as well as in to the ability to adapt to life changes and to the misfortunes. Seppälä (2008, 507) presents adaptive skills as:

- conceptual (speaking and understanding the native language, writing and reading, containment of money and understanding time)
- social (ability to build and maintain relationships, capability to behave according to a situation, responsibility, compliance of laws and norms, self protection)
- practicality (own hygiene, functional skills related to living, moving, working and free time)

As well as in AAIDD, in Finland the decrease of function or intelligence has to emerge before the age of 18 so that the word adult with intellectual disability can be used. After this age the term of dementia is utilized. In some cases disability is identified during the first year after birth, but often only after that, as the development of a baby is not proceeding. (Kaski 2009, 17, 28.)

International classification of diseases, ICD-10 (International statistical classification of diseases and related health problems) by World Health Organization (WHO) describes intellectual disability as “a condition of arrested or incomplete development of the mind, which is especially characterized by impairment of skills manifested during the developmental period, skills which contribute to the overall level of intelligence, i.e. cognitive, language, motor, and social abilities. Retardation can occur with or without any other mental or physical condition”. (Website of WHO 2007.)

As stated in WHO, intellectual disability can occur without any other mental or physical condition. However, intellectual disability often relates to other developmental disorders, damage in other organs than the nervous system only, additional disabilities and conditions such as sensory, speech and physical disabilities, autism, epilepsy, mental disorders, CP and challenging behavior. Additional disabilities appear more often together with severe and profound disabilities whereas mild and moderate disabilities are rarely connected to additional disabilities. Together these lead to limited capacity which results to boundaries in active daily living. (Kaski et al. 2001 16, 23, 121; Seppälä 2008, 507).

According to Seppälä (2008, 508), the difficulties related to ones disability should be considered according to his age and the normal social and cultural development connected to that phase. Also functional abilities should be taken into account. Functioning of an adult with intellectual disability is a proportion of residential and operational environment. The problems faced are often a consequence of the fact that the function does not meet with the requirements of the environment (Website of Kehitysvammaliitto 2009). One may well be active around common people and in familiar environment whereas limitations may be significant outside the milieu. (Seppälä 2008, 508.)

The level of disability also has an influence to the functional ability of a person. As the intellectual disability is more profound and severe the need of support of active daily living is greater. The need of support is less with a person having lower level of disability. A person with a mild disability is, for example able to go to special education school, is independent in everyday living, is able to live independently or

slightly supported and he has ability to work in supported circumstances. The overall function and social adaptation may improve along with education and rehabilitation. (Kaski, Manninen, Mölsä & Pihko 2001, 22; Mälkiä, Puolanne & Palosuo 1991, 54.)

AAIDD has developed a theoretical model of intellectual disability. In a simple way, it concludes the concepts already discussed in this chapter. The model clarifies the key elements in understanding the individual's functioning and the relationship between a person, the environment and support (Figure 1). When the functioning of an intellectually disabled person is not enough support is required. (Website of World Health Organization 2001).

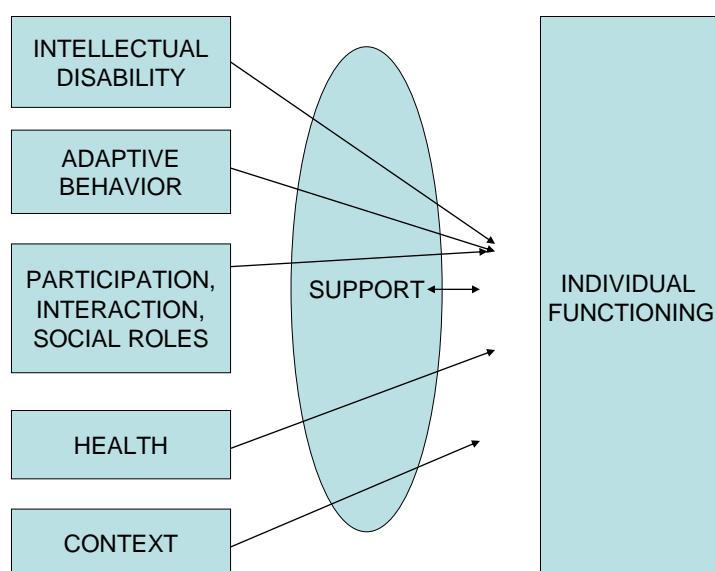


Figure1. Theoretical model of intellectual disability

Limitations in functional ability, adaptive skills, intellectual functioning as well as in development influence greatly to a person's everyday living. Because this thesis discusses about two major foundations of the life of an adult with intellectual disability, rehabilitating work activity and adapted physical activity, the matters discussed are important to be understood.

3 REHABILITATION OF AN ADULT WITH INTELLECTUAL DISABILITY

Rehabilitation is the alteration process of the individual, or individual and environment, which aims to promote functional ability, individual surviving, well-being, participation and employment of a sick, disabled or handicapped person. (Kuntoutusselonteko 2002). In Finland, rehabilitation is divided in to medical, social, professional and educational rehabilitations, hence it is a multiform wholeness of its content and execution (Järvikoski & Härkäpää 2004; Mälkiä 1991, 13).

According to the Constitution (1999/731), everyone has a right for adequate social- and health services, which promote the citizen's well-being, health and security (FINLEX). Rehabilitation is a part of disability services and the need, as well as the character, of rehabilitation are determined in an individual support plan, which will be explained more thoroughly in the following chapter.

Rehabilitation aims in the best possible management of age related roles and functions, demanded in everyday living. Equality, participation, empowerment and normalisation are the foundation of rehabilitation for this special group. Need and amount for rehabilitation varies according to age, functional ability and situation of life. There are times when an intense rehabilitation is more necessary such as in order to develop a new skill. (Kaski 2009, 246; Seppälä 2008, 516.)

3.1 Disability services as a base for rehabilitation

In Finland there are approximately 35 000 - 40 000 people with intellectual disability. As a member state of the United Nations and the European Union, Finland is engaged to support open society for all. Hereby one of the main aims of the Finnish government is to promote the equal rights, life control, function, ability to work and independence of an intellectually disabled person. The right of participation, to

equality and positive special treatment create the base for Finnish policy, concerning people with disabilities. (Webpage of the Ministry of Social Affairs and Health.)

The psychosocial foundation of an adult with intellectual disability comprises of housing, rehabilitating day and work activity, maintaining social relationships and health care. In Finland, a person with intellectual disability is being supported from three various directions, in order to enable management of the actions and roles connected to one's everyday living. These directions are (Seppälä 2008, 508):

- intensify the functional ability
- modify housing environment
- arrange support services

An individual service plan is built based on factors mentioned above. It is drawn up by the municipal officials, the individual concerned and his or her relative or guardian. The service plan includes among the personal information, a description of current life situation (housing arrangements, work, free time); personal hopes and dreams for the future; need for support and services as well as a plan concerning financial issues. In order to concretize the service plan, an individual support plan is designed with the aim of supporting a person's function and independence. (Webpages of the Ministry of Social Affairs and Health 2009; Seppälä 2008, 517)

According to the Finnish Ministry of Social Affairs and Health (2009) general public services are planned in order to suit everyone and hereby services are primarily organised according to social welfare services. When this is insufficient special services are arranged according to the Disabled Service Act. Special services are: transport service, service housing, rehabilitating day and work activity, rehabilitation, personal assistant service, housing modification service, assistive aids connected to housing and interpreter service. Municipalities contrive facilities. In this work rehabilitating work activity will be considered more closely.

3.2 Work activity as a part of rehabilitation

According to Special care for disabled Act (519/1977) a person with intellectual disability is contrived rehabilitating work activity as a part of disability services. The purpose of rehabilitating work activity is to promote adaptation to society. In the following three diverse work activities – work centers, open work action and day activity - will be presented. However, the focus will be on the work centers.

In order to support the families having children with intellectual disability a pre-stage of rehabilitating work activity, day care and control centers, were discovered in the 1950s and the 1960s. At that time the centers were aimed mainly for school aged children, however work departments for adults were soon attached to these. During this time the activities consisted of teaching, work and hobby activity. In between 1970 – 1980 the yearly increase of day care and control centers, and later sheltered workshops, was fast. In the 1980s the operation transmitted the pressure more on work for the reason that teaching was taken over by schools. The name sheltered workshops later transformed into rehabilitating work activity. (Hyvärinen, Vesala & Seppälä 2002, 7.)

In 2002 the number of rehabilitating work activity centers in Finland was estimated to be approximately 350 and the number of customers more than 11 000. Majority of the work and activity centers are provided by municipalities. Most of the customers are adults having intellectual disability but they may also include clients with mental disturbances. (Hyvärinen et al. 2002, 7.)

It is defined in Kuntoutusselonteko (2002) that rehabilitating work activity means maintaining and promoting functional ability. An adult with intellectual disability is permitted to come in to rehabilitating work activity on the bases of rehabilitation. It is destined for the persons whose functional ability has declined because of disability. (Hyvärinen et al. 2002, 8.)

As work activity is a part of the psychosocial foundation of an adult with intellectual disability, work centres have a significant role in structuring the everyday living of its customer. In addition, the centres aim to the best possible social participation by

developing the customer's social readiness. An important item is to give them a chance to work as a part of a work community. Also equality as a citizen, having the same possibilities, rights, services and respect as the others; empowerment; the emphasizing independence of function and being a member of society are also important elements in rehabilitating work action. (Kaski 2009, 340; Seppälä 2008, 509.)

When preparing work for a person, with disability it is as important to recognize the functional disabilities of as to distinguish the abilities because intellectual disability and psychosocial limitations do not come evenly evident on each areas of function (Seppälä 2008, 508). The personal motivation, hopes and attitudes for work are the foundation when planning a work action for an individual with intellectual disability. The action chosen should correspond to his interests and offer possibilities according to his skills, learning and interaction. (Kaski et al. 2001, 249.)

Work is often industrial subcontractor work, for example packing and composing assignments and own products of the unit, in the vein of metal and woodworking industry or textile and sewing work. In addition, many inter-unit occupations such as kitchen work and cleaning are prevalent formats of rehabilitating work activity. Work stations are planned with the intention of a worker to be able to develop his professional skills and proceed to more demanding occupations. The adult with intellectual disability working in a centre type of rehabilitating work activity do not have an employment and he is not being paid for the work. The main living normally consists of disability pension and other social security advantages. Apart from work and important life content rehabilitating work action offers also other rehabilitating actions such as adapted physical activity possibilities (Hyvärinen et al. 2002, 7; Kaski 2009, 320, 340.)

In addition to work centres, work activity has also been arranged in a form of open work as well as day activity. In open work, employees are situated in normal workplaces such as in variant work situations of the municipality or in an institute kitchen. Day activities are arranged for more severely disabled and for those who experience work centres and open work as too demanding or who require different kind of rehabilitative actions beside the work. Day activity may include manual

skills, everyday activities, self care, communication and self-expression. (Hyvärinen et al. 2002, 8.)

3.3 The work center Monituote

3.3.1 Monituote as an organization

In the city of Pori, situated in the Western-Finland, both open and centre type of rehabilitating work activities are offered for adults with intellectual disability. Both activities are supported by social and health services as well as the basic security of the municipality. The open work action placements are situated around the town and four work centres, Monituote, Ojantie, Sampola and Koivula, organize activities for people with variant levels of disability. (Webpage of the city of Pori)

The work center Monituote is an independent unit. It was founded in 1964 due to a need of day activity for adults with intellectual disability. The primary aim of the centre is to activate and support the customers in independent coping at work as well as in diverse life events and to give a normal rhythm to everyday living. As mentioned by Kaski (2009), as well as by Seppälä (2008), equality, participation, empowerment, the best possible management of age related roles and functions demanded in everyday living, create a foundation for rehabilitation. Rehabilitation based work action is emphasized. Daily activities are designed to follow a normal model of a work day as well as possible. Equally important it is to promote learning and develop new skills, furthermore to maintain already discovered abilities and function. (The Historic of Monituote 2007.)

The work centre occupies a 700 m² space from the second floor of an industry house called Satakunnan Teollisuustalo (Satakunta industrial house). It is located two kilometers from the centre of the city and most of the facilities. A map presenting the city of Pori will be presented later on text.

When a new worker enters the work center a plan of action is designed individually for him. It gives necessary information to the staff concerning the workers adaptive skill and intellectual functioning, functional abilities and disabilities. In sequence the skills of the worker can be improved. The plan of action includes five parts;

- basic skills (reading, writing, counting, knowledge of the time and phone, transportation, dining)
- characteristics (working in a group, social skills, activity level)
- need for adapting support and guidance for learning (behavioral problems, learning style, need for guidance)
- readiness for other actions (ability to receive advice, carefulness, motivation, work coping)
- goals

3.3.2 Monituote people

There are 38 workers in Monituote, having been diagnosed a mild intellectual disability. Added to this, there are also workers having psychiatric disorders. Due to the low level of disability, additional disabilities, such as epilepsy, appears only among few workers. None of them is in need of an assistive aid for moving, but one uses a communicator and picture cards in order to communicate. Out of thirty-eight workers the majority, twenty-five, is men and thirteen are women. The age varies from nineteen to sixty. Workers having the longest work history in Monituote have been part of the activity for over twenty-five years and the newest workers have joined the group only a year ago.

Monituote staff members are a well co-operating mixture of diverse professionals, experience and generations. The age distribution of the personnel varies from twenty-six to sixty-two years including one male and three female employees. The instructors have experience of working with adults with intellectual disability from a few years to more than forty years. The educational background of the personnel varied largely including a bachelor of social services, a assistant nurse, a technical

nurse and an instructor of mentally handicap. The number of Monituote workers and instructors is presented in the following table (Table 1).

Table 1. The number of Monituote personnel and workers

	Workers	Instructors
Men	25	1
Women	13	3
Total	38	4

Most of the clients live in halfway houses or with their care taker and eight of them live independently. The city provides a buss card for adults with intellectual disability, hence the clients mostly arrive to work by buss. Some have a right for transportation service. Especially in the summer time a number of clients prefer to ride the bike or walk to work.

Depending on the worker, a work day starts normally at eight or at nine, lasting four to seven hours. The workers are divided in four groups which are guided by one instructor. From one to four, the groups are named as “The energetic” (Pontevat), “The foot soldiers” (Puurtajat),”The creative” (Luovat), and “The natural” (Luontevat). The floor plan of Monituote, illustrating the group distribution, is presented in the following (Figure 2). The groups are solid by their members and instructor. The members are removed to another group only in a special situation due to a conflict in social relationships.

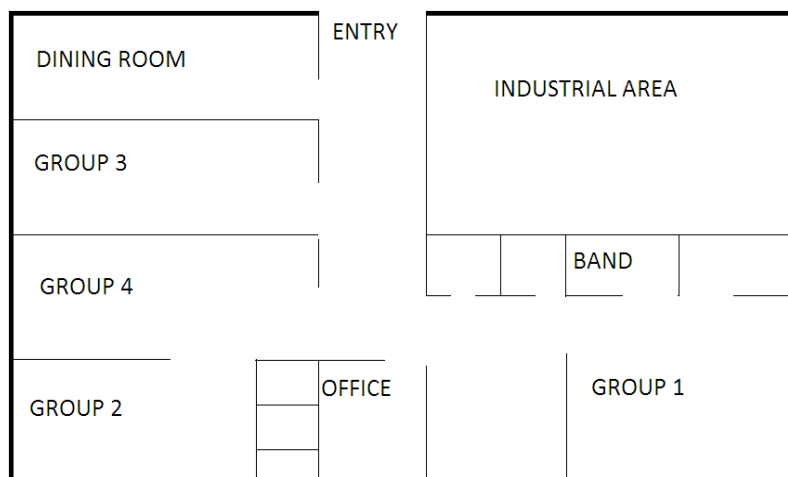


Figure 2. Monituote floor plan

The role of an instructor is to guide and support the workers depending of their needs and to evolve their learning by modifying the task when needed. In addition, the instructor organizes the group in order for it to be well functioning by taking account the physical and mental resources of each individual. Planning recreational and adapted physical activities as well as instructing them is a part of the work. Within the instructors one is a supervisor. He is in responsibility of the staff and administrative duties such as the budget or execution of the goals. He instructs also a work group and teaches a band gathered from the clients.

The work includes simple assignments given by eleven different subcontractors such as packing game boxes, gathering paper piles for packaging and woodwork, to mention a few. The photograph below, presents the dividing of game pieces (Photograph 1). In general the work assignments are not delivered for a certain group. The only exception is the woodwork which is assigned for a group of men. Learning skills of daily living, for example cleaning and cooking are also under attention. The work centre receives daily a readymade food which is laid on to the table by workers who have educational background of kitchen work.



Photograph 1. Packing game pieces

In this thesis work centre Monituote is used as a case example to describe adapted physical activities organized in this rehabilitating work centre.

4 ADAPTED PHYSICAL ACTIVITY

In 1996 Finnish Physical activities for special groups 2000-commission (Erityisryhmien liikunta 2000-komissio) adjusted a twenty years old concept of adapted physical activity as follows: "Adapted physical activity depicts physical activity for person who has complications in participating to generally offered activities and who demands adjustments and special knowledge in order to be active due to injury, illness or other decrease of functional capacity or because of social situation". (Mälkiä & Rintala 2002, 6.)

4.1 Fields and aims of adapted physical activity

The aims of adapted physical activity follow the same guidelines as normal physical activity. Physical exercise is a way to maintain and enhance physical and functional ability of persons with intellectual disability, and consequently to support the ability to work. Age, experience, environment and health condition influence greatly to an

individual's level of function. Therefore adapted physical activity seeks for adequate activity possibilities for all. (Mälkiä et al. 2002, 6-8, 34.)

Adapted physical activity is an umbrella term for its three application areas: adapted sports & recreation, adapted physical education and adapted physical activities in rehabilitation (Heikinaro-Johansson & Huovinen 2007, 191). Over the past few years increased attention has been given to adapted sports expanding available sport offerings to an increasing number of individuals with disabilities. Already in the 1870s deaf pupils became involved with organized sports in the Ohio School and in 1924 the first formal international competition, silent games, was established in Paris. To promote and provide athletic competition for individuals with intellectual disability Special Olympics were created and the first international games were held in Soldier Field, Chicago in 1968. (Winnick 2005, 17.)

Adapted physical education is viewed as a sub discipline of physical education that provides safe, personally satisfying, and successful experiences for students with unique needs (Winnick 2005, 4). The curriculums are adapted to meet the individual needs, to minimize failure and preserve self-esteem involving physical and motor fitness, individual and group games as well as sports, fundamental motor skills and patterns, skills in aquatics and dance. In other words, the education should emphasize an active program planned to attain the benefits of physical activity through meeting the needs of students who might otherwise be relegated to passive experiences associated with physical education. (Sherrill 1986, 5; Winnick 2005, 4.)

Besides the applications of adapted physical activity in sports, recreation and education, it is furthermore utilized in rehabilitation of a person with disability or prolonged sickness. Physical activity is a part of each area – medical, professional, social and educational - of rehabilitation. In adapted physical rehabilitation the overall aim is to promote empowerment and quality of life. (Mälkiä 2002, 6.)

Adapting a physical activity may refer either to technical adaptations, such as using assistive aids and adapting the game equipments, structural, for instance adapting rules and instructions of the game or educational, meaning adaptation of teaching methods or the way of practicing and teaching (Mälkiä 1991, 15). Good adapted

physical education should be associated to psychomotor, cognitive and affective domains of learning. The aims of adapted physical activity should be set down together with the instructor and the participants in order to commit oneself more to the process. (Winnick 2005, 7.)

The aim of psychomotor domain is to learn fundamental motor skills and patterns in order to control active daily living including self-care, school, work and pleasure time activities. Psychomotor domain also aims in physical and motor fitness to achieve the benefits of physical activity, such as good posture, endurance, flexibility and muscle strength. (Sherrill 1986, 13.)

Cognitive domain goals are to enhance auditory, visual, tactile, vestibular and kinesthetic functioning and to improve cognitive, language and motor functioning through increased sensory integration. Also to increase creativity in movement and thought is a major aim in cognitive domain. (Sherrill 1986, 13.) Though persons with intellectual disability have a lower level of intelligence compared to the average they can still learn and they should not be underestimated (Mälkiä et al. 2002, 35).

To improve mental health so that the activity presents fun and strengthens a positive self- and body-image is the most important aim of affective domain. Understanding the body and its capacity to move, as well as to accept its limitations, also go under the affective domain. (Sherrill 1986, 13.) According to Sherrill (1986, 13) social competence should also be listed under the affective aims. Reducing isolation, developing and maintaining friendships, and appropriate social behavior are matters of the social domain.

According to Liikuntalaki (1998/1054), the law of physical education, in Finland municipalities, organizations, schools as well as social and health care institutions are responsible to arrange physical activity facilities for all. The aim of this law is among other things to advantage the well being and health of the citizens as well as to contribute to equality and tolerance.

4.2 EUSAPA – European Standards in Adapted Physical Activity

EUSAPA - European Standards in Adapted Physical Activities – project is a mission which aim is to expand and discover adapted physical activities on the European level. Satakunta University of Applied Sciences works as an associate partner in the project and this theses is a part of EUSAPA.

European Standards in Adapted Physical Activities - project was discovered in Europe October 2008, with the purpose to explore and develop adapted physical activities. This two-year project consists of eleven partner countries across Europe. The main aims of the EUSAPA-project are to describe professional competence in the three fields of adapted physical activities (1 - adapted physical education, 2 – adapted sports and recreation, 3 – adapted physical activities in rehabilitation), to recognize the need of each area in each partner countries, to define academic standards and to develop international academic framework to guarantee the quality of professional preparations on European level. Finland is also one of the cooperation countries. The main represent of Finland is adapted physical activity professor Pauli Rintala from the University of Jyväskylä. A senior lecturer of sport scientific subjects Tarja Javanainen-Levonen from Finland, Satakunta University of Applied Sciences stands for the field of rehabilitation. (Webpage of EUSAPA.)

As a part of EUSAPA-project, a study, EUSAPA preliminary survey, exploring the role of adapted physical activity in rehabilitation was carried out in spring 2009 (APPENDIX 1). In Finland, the inquiry was carried out as a deliberate sample in Western Finland, Satakunta region. The survey was sent to forty-seven institutions including rehabilitation center, rehabilitation wards in hospitals, rehabilitating work activity centers and elderly units. The return percent was 72, 3%. According to the results, more than 91% of the institutions arranged physical activities to their customers and approximately 59% had at least four physical activity programmes in a week. Physical activity sessions included instructed group activities (aquatics, chair gymnastics, balance training), individual activities (gym training, aquatics) and specific programmes or sports happenings. Physical activity sessions were instructed by physiotherapists in 53% of the cases, adapted physical instructors in 9% of the cases and other professionals in 71% of the cases. (Javanainen-Levonen 2009.)

According to the survey results, rehabilitation institutions in Finland offer their clients an opportunity to be active although the institution would not have a physical activity professional.

5 AIMS OF THE THESIS

In this thesis the aims are to describe adapted physical activities contrived in work rehabilitation for adults with intellectual disabilities and to share information concerning the topic. Based on the EUSAPA preliminary -survey one practical case example - work centre Monituote from Pori, Satakunta region was chosen. The purpose of the thesis is to describe more detailed matters, for instance what kind of adapted physical activities and how often are they organized in Monituote, who are the co-operation parties, who are instructing the activities and how many members of the work center are participating.

Information concerning the topic is shared for the use of other physiotherapy and adapted physical activity students as well as for all social and health care professionals. It is crucial for specialists working with adults having intellectual disability to understand the benefits of adapted physical activities as well as the possibilities of organizing activities for their clients. More readers are desired for the reason that the work is completed in English. In addition, based on the thesis a photo book, illustrating the activities contrived in Monituote work center for the clients, is produced for Monituote. The photo book will be created for the work center use only, after the presentation of the thesis.

6 METHODS AND PROGRESS

6.1 Methods

In order to explore adapted physical activities in Monituote group interview was chosen as an investigation method. The interview was executed as a theme interview in which the themes of the interview are known but the questions are not perfectly suited. The writer chose the method, because a group interview is an effective technique to gather information from a large number of people and a theme interview creates conversation between the interviewer and the interviewed and gives the interviewed an opportunity to freely point out issues concerning the matters discussed about. (Hirsjärvi, Remes & Sajavaara 2007, 203.) Based on the aims, four themes were chosen for the interview. The themes for the interview were the instructors in the work center, the workers of the work center, rehabilitating work activity in Monituote and adapted physical activities arranged there (Table 2). Additional questions and corrections to the interview were inquired during the writing process.

The personnel of Monituote were interviewed on 8th of June 2010. The participation percent was 100% including the manager, four permanent instructors, a student and a cleaning lady. The interview took place in work centre, in the manager's office, presented in the floor plan (Picture 2). The time reserved for the interview, was one hour.

In the beginning of the session the author presented herself and the degree program which the bachelor's thesis is prepared for. After that came the background, aims and methods of the thesis. We began the interview from the first theme of the interview, the instructors. The age distribution, profession, the role of an instructor in Monituote, physical activity background and working history in Monituote were discussed. The next theme was the workers. The issues, such as age and sex distribution, living conditions, transportation, diagnoses, the level of disability, special needs and possible assistive aids of the workers, the duration of the work

history and living conditions were discussed, as well as how the functional restrictions of the workers were taken into account.

The third theme covered rehabilitating work activity in Monituote. Questions such as how were the daily routines, what kind of work was arranged, in what way was the work divided for the workers and if the workers participate in domestic work, were pointed out. Finally we discussed about the adapted physical activities arranged in the work center. The conversation concerned the role of adapted physical activities in the center, what kind of adapted physical activities and how often they were organized, who were the co-operation parties, how many members of the work center were participating and what were the challenges in instructing adapted physical activities in a work activity center. The content of the interview is presented in table 2

Table 2. The outlook of the interview

Theme	Content
Instructor	<ul style="list-style-type: none"> - Age distribution - Education - The role of an instructor - Work experience - Physical activity background
Workers	<ul style="list-style-type: none"> - Age and sex distribution - Diagnose - Living conditions - Transportations - Assistive aids and special needs - Level of disability - Work history - Consideration of the functional restrictions
Rehabilitating work action	<ul style="list-style-type: none"> - Structure of the work day - Work assignments - Daily routines - Sub contractors - Distribution of the assignments - Domestic work of Monituote
Adapted physical activities	<ul style="list-style-type: none"> - Program - Frequency, duration and participation - The role of APA in the centre - Cooperation parties - Challenges

The instructors and other staff members participated actively in the conversation. The role of the writer was to lead the conversation according to the themes and to ask additional questions. The writer took notes during the interview.

The physical activities contrived in Monituote were described by written and illustrated with the use of photographs. With the purpose of investigate the adaptive physical activities arranged in Monituote more closely, observation was used. The author worked as a participating observer by taking part in each Monituote activity. With the intention to share information of the adapted physical activities arranged in Monituote, a photograph album was produced for the work center. The book will be given to Monituote use only. Table 3 presents an overview of the aims, the methods used and the outcome products.

Table 3. An overview of the thesis

Aims	Methods/material	Outcome
To describe APA contrived in work rehabilitation for adults with intellectual disabilities	Monituote historic Interview of the personnel Observation Photographing	written output
To share information concerning the topic	Presentation of the thesis	PowerPoint presentation A photo book

6.2 Progress

The theme for the thesis emerged in the winter 2009 - 2010. The first contact between the co-operation parties took place in January 2010. The process plan was approved in February 2010, following orientation to the subject. The writing process began in the summer 2010. Execution of the thesis, including interview, photographing and observation, took place in the summer and the following autumn. Permission for photographing and the use of the pictures was asked for from the guardians of the workers (APPENDIX 2). The work was presented in November 2010. The process of the thesis is illustrated in the following (Figure 3) according to

the Instructors on writing bachelor's thesis (2008) by the Satakunta University of Applied Science.

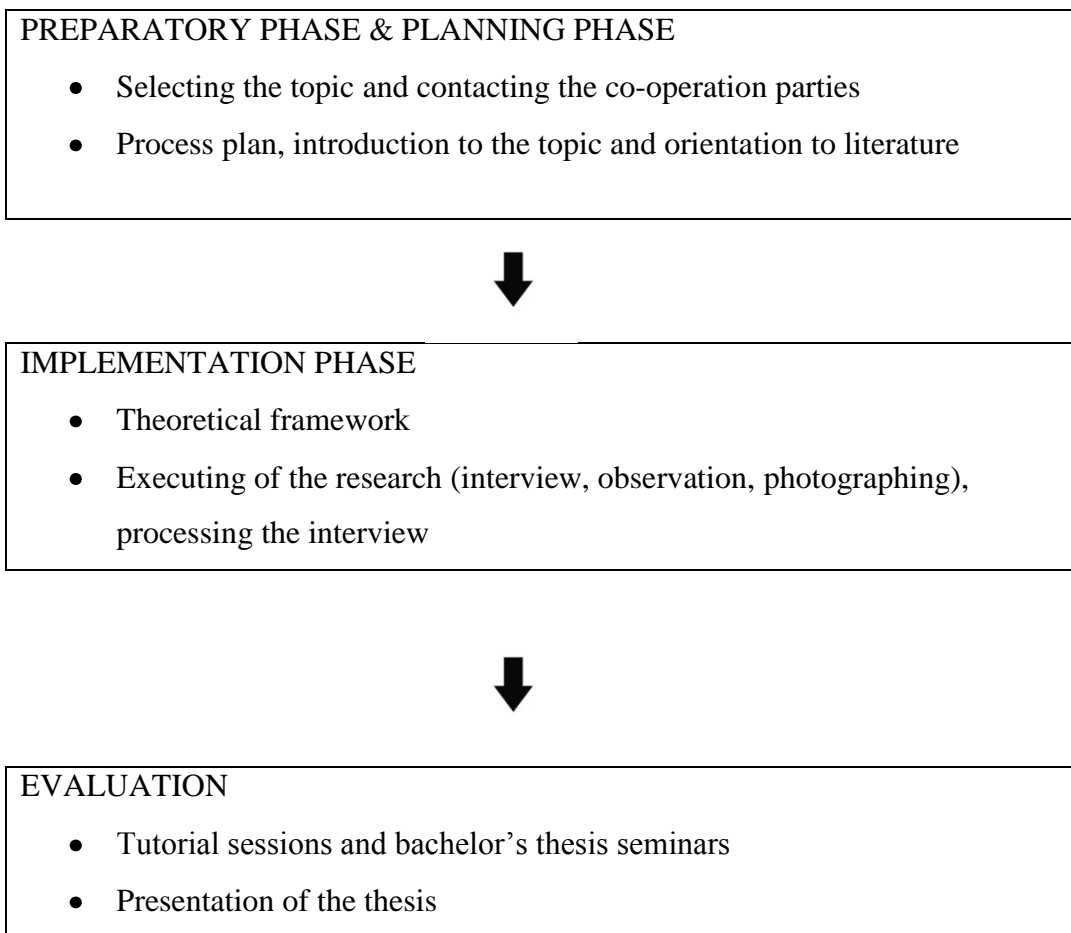


Figure 4. Process of the thesis.

7 DESCRIPTION OF ADAPTED PHYSICAL ACTIVITIES IN MONITUOTE

Work center Monituote is an example of those 71% of the institutions answering to EUSAPA preliminary survey who had another than adapted physical activity professional leading the activity sessions. Already according to EUSAPA – survey it

can be stated that Monituote organizes a variety of adapted physical activities to its clients. However, more information was gathered as a part of this thesis project. Activities are arranged nearly every day regardless of the fact that none of the Monituote staff members has professional background on the field of adapted physical activity. An active life style of the staff members and life-long interest towards physical activities acts as a base for instructing activities.

A weekly changing program is planned to be effective and interesting to the clients. The program is diversified, including activities performed inside and outside, from games to relaxation. The program is not solid from week to week but the time for the activities is usually after lunch, 11.40 am. The amount of activities depends on the weather, the amount of work assignments and the supply of co-operation based activities. The weekly plan is presented in writing and pictures are shown in the hallway next to the office of the work center (Photograph 2).



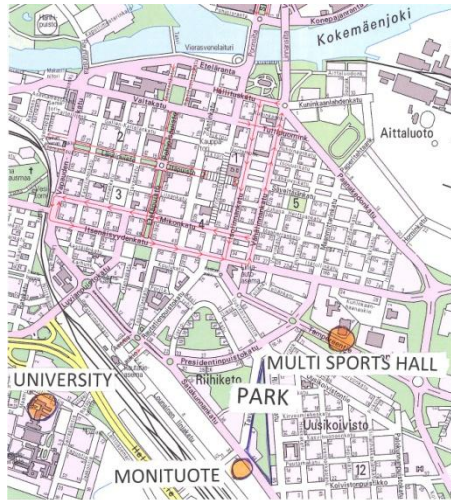
Photograph 2. Weekly activity schedule.

Some of the games and equipments used are known worldwide whereas some are invented or adapted by the instructors. Adapted physical activity is experienced as an important part of the work centers everyday life. The staff reported that the activities work as a break between the work assignments, and they are found to bring joy,

success and solidarity to the group. Physical activity is based on voluntarily, even though they are already considered in the individual action plan made drawn by the client and an instructor. In other words, every client is allowed to participate in all activities, but they are not forced to any.

Due to the intellectual disability commencement of an activity is occasionally hard for the clients. The staff informed that one has to put more effort on persuading one person to an activity than the others. Also the fact that an adult with intellectual disability does not have good body awareness or long concentration gives challenge to instructing adapted physical activities. The instructors reported that there can be seen a change in the adapted physical activity participation numbers when compared to the earlier years. Nowadays the youth are more sedentary than before. The most active are the oldest workers whereas the majority of the young prefer not to participate to the adapted physical activities offered.

The adapted physical activities which are completed with the work group are mostly arranged in Monituote. Because of the lack of a gymnastic hall the activities are held in the same rooms where the assignments are completed. Activities in which there are participants from many groups the activity is organized in the dining room (Figure 2). If the activity, for example gym training, requires more space and adequate equipments, it is arranged outside of Monituote. The work centre is situated in a good location; hence distances to the few activity places are short. A map of the centre of Pori is presented in the following (Photograph 3). Monituote as well as the activity facilities which they use are to be found there. The activities arranged in Monituote can be divided into around the year activities, seasonal activities, break and co-operation based activities.



Photograph 3. Map of Pori

7.1 Around the year activities

7.1.1 Gym training

The gym training is arranged twice a week. The training takes place at the multisport hall which is situated two kilometers from Monituote (Photograph 3). The clients and the instructor walk to the activity center and complete a 40 minute gym training. The session is organized as a circuit training, in which the exercise stations are marked from one to fifteen and the participants train in one station for a minute and change to the next point. Circuit stations include muscle strength exercises for the entire body with gym machines and free weights as well as endurance training with a bike, a cross-trainer or a hand wheel. The picture presents the use of the leg press (Photograph 4).



Photograph 4. Leg press

7.1.2 Walking groups

Walks are arranged from one to five times per week depending on the amount of work assignments. It is a very popular, effective activity and easy to arrange. The length of the walk varies between 1,5 km to 4 km circling around the Monituote neighborhood (Photograph 5). The tempo of the walk is the tempo of the slowest person, hence the route is chosen according to the group. As the functional level may vary remarkably from person to person the aim is to divide the walkers into slow and quick people and walk different routes on different days with each group.



Photograph 5. Walking around the park

7.2 Seasonal activities

7.2.1 Games

In the summertime Monituote groups play many different kinds of games outside. The work centre is situated next to a park where there is a sand field as well as a grass field which provide suitable conditions for outdoor activities (Photograph 3). Well-liked games are Finnish mölkky, petangue, modified golf and modified basketball, to mention a few. As the annual budget for physical activities is small the instructors have used their imagination when considering equipments for games. For example the requisite for mölkky and modified golf are produced by the instructors. They are made out of a cardboard roller, paper and carpet. Game sessions take up to 40 minutes per time. Photograph 6 illustrates a petangue competition and photograph 7 presents modified golf created by the instructors.



Photograph 6. Petangue

Photograph 7. Modified golf

Football has traditionally been one of the most popular summer time activities. It has been favored as well by the young as the older workers. For decades Monituote has had its own football team and tournaments between other work centers have been arranged.

7.2.2 Park gymnastics

Park gymnastic takes place on a grass field in the park mentioned earlier. The session starts with a warm-up which includes marching, rolling the shoulders and stretching the sides. Park gymnastic continues with muscle work exercises. In order to increase

loading of the muscles each member of the group has two water bottles filled with water. Using the bottles, the instructor guides biceps and shoulder exercises for the participants (Photograph 8). The 20-minutes park gymnastic ends with stretching.



Photograph 8. Park gymnastic

7.2.3 Relaxation

Relaxation is arranged once a week during the dark time of the year. A 15-minute session is held in the dining room where the tables and chairs have been moved to the sides of the room. The clients lay down on mattresses and the lights are shut down. The instructor then plays calming music from a CD-player as the clients try to relax themselves (Photograph 9). After the music the CD plays an imaginative story.



Photograph 9. Relaxation

7.3 Break activities

In addition to the activity pauses mentioned earlier Monituote work groups have also shorter breaks from the work assignments during a day, in order to promote work ability and efficiency. The instructor is the one to decide whether the group requires a short break because of restlessness or because of tiredness. An active break may include games such as table tennis or corona. Occasionally the group is guided to perform a variety of energetic movements and stretching either in standing or in sitting position. Activity of this kind only takes up from five to ten minutes. Photograph 10 illustrates an active break.



Photograph 10. Break exercising

7.4 Co-operation based activities

7.4.1 Educational collaboration with SAMK

Satakunta University of Applied science (SAMK) collaborates with many cooperation parties while organizing training in adapted physical activity for students in physiotherapy and in social services. Particularly physiotherapy education has a long tradition in collaborating with Monituote. (Javanainen-Levonen & Kärki, 2007.). This cooperation can be divided into annual and occasional collaboration.

Annual cooperation is organized integrated to the basic education of the physiotherapy students. The aim, in the beginning of the APA-course, is to plan and instruct adapted physical activity session for the first time in real life settings for adults with intellectual disability. A study visit to Monituote precedes the implementation of instructional sessions. The students are divided into smaller groups. These groups are responsible for planning and instructing a recreational physical activity session for one of the four work group (Figure 3). After the first implementation the students are able to improve the session. With the improvements the same session is instructed next week. The sessions have included for example

bowling, tennis, ball games and many other activities with diverse equipments. In the photograph 11 an activity containing scarves is organized (Photograph 11)



Photograph 11. The use of scarves and pairs in recreational sessions

More advanced adapted physical activity courses create the base for occasional collaboration. In APA 2, the physiotherapy students are introduced to a variety of adapted physical activities. The students are again divided into smaller groups which instruct a session to their class. The instructing group is also allowed to invite Monituote to their session. One example of a session contrived on the bases of this course has been frisbee golf in Park Kirjurinluoto. In APA 3 the physiotherapy students arrange an exercise course for one special group, such as for Monituote. The implementation is often executed in the University gym. The University is situated close to the work center which gives the workers a chance to walk there. The participants meet the organizing group for a few times with the same theme. For example a fitness club, ball club (Photograph 12) and a dance course have been arranged (Photograph 13). The Monituote instructors reported that the collaboration with the University is considered to be the most pleasant adapted physical activity from the workers point of view.



Photograph 12. Ball club



Photograph 13. Dance course

7.4.2 Special Olympics

In Monituote, there are two Special Olympic skiers who have participated in the Olympics along with the national team since the 1990s. Monituote has actively promoted the athletes competitive careers by gathering sponsors and supporting the athletes in planning the competition journeys. Nowadays the role of Monituote as a sponsor seeker has diminished as the funding is arranged by from the national level.

8 DISCUSSION

The aim of the thesis was to describe adapted physical activities contrived for adults with intellectual disabilities in rehabilitating work center Monituote. There revealed to be a vast offer of adapted physical activities, lead by Monituote instructors and physiotherapy students. The activities create a diverse combination of strength and aerobic training, recreational activities, gymnastic, relaxation, break activities and collaboration activities. The activities are now evaluated according to the three domains of learning and their goals, whereby a good activity session should correspond with (Winnick 2005, 7). Also the adaptation methods as well as the instructors will be evaluated. All activities are first considered according to the effective and social domains after which each activity is individually compared to psychomotor and cognitive domains.

8.1 Evaluation of the results

The physical activity is taken into consideration already when the individual action plan is drawn by the client and an instructor. As the aims of adapted physical activity are set down together, the client is more committed to the process (Winnick 2005, 7). Each activity corresponds nicely with the aims of affective domain. Each activity improves mental health, by the means that the activity is fun. This was seen in every session from the smiling faces of the workers. Especially the cooperation based activities and the game sessions broad happiness and joy for the participants. Moreover, being active improves the participants understanding of their body and its capacity to move. Matters of the social domain are also an element of each activity. Friendships and appropriate social behavior are being developed.

The activities which continue around the year, walk and gym training, are a mixture of aerobic exercising and strength training. Both follow the basic aims of psychomotor domain by including learning fundamental motor skills and patterns in order to control daily living, such as walking, lifting, pulling as well as physical and motor fitness. From the point of view of cognitive domain, motor functioning

improves. The walk route and also the route to the gym include crossing roads. Improvements of auditory, visual, vestibular and kinesthetic functioning are obtained during a careful observing the traffic.

Seasonal activities; games, park gymnastic and relaxation, give a nice spice for the activities, which continue around the year. They are all diverse from their nature and execution. Games, such as Finnish mölkky and petang fulfill the cognitive domain by increasing the creativity in movements and thoughts, since during a game it has to be considered what would be the most profitable thing to do in order to win the game. Football, in the other hand promotes the psychomotor domain which aims to advancements in physical and motor fitness, such as good posture, endurance and flexibility. The same psychomotor aims are also considered in the park gymnastic. The aims and benefits of relaxation go under the cognitive domain. Auditory and tactile functioning is promoted as the workers listen to the relaxation cd and feel their body parts attached to the floor.

The goals of break activities arise from psychomotor domain due to promotion of posture and flexibility. Cooperation based activities arranged by the physiotherapy students, are well organized and planned so that, they would cover each aim of adapted physical activity. Sessions guided by the physiotherapy students are an important developer of the social competency of the participants. Communication and interaction with new, unfamiliar people creates the workers appropriate social behavior and new activities develop adaptation to new situations and demands.

An important matter in adapted physical activity is exactly the part of adapting a physical activity. It may refer either to technical adaptations such as using assistive aids and adapting the game equipments, structural for instance adapting rules and instructions of the game or educational meaning adaptation of teaching methods or the way of practicing and teaching (Mälkiä 1991, 15).

The instructors in Monituote have succeeded well in adapting the game equipments and rules of variety of games. The self made equipments are a good example of this. In adapted golf the bat is easy to handle and light because it is made out of cardboard and the ball is big enough for the workers to hit on it. In modified basketball the

basket is situated low and the ball is smaller in order for it to fit better to the basket. The rules do not either correspond to normal basketball but they are adapted so that everyone would get a chance to succeed. In park gymnastic the weights are made from juice bottles filled with water and during the walks the route is chosen according to the aerobic and functional level of the group. Moreover, each activity is modified according to a situation, person and the need. Today everything might go just as planned, but tomorrow the matter might be just opposite. Since one never knows what is coming adaptations have to be made quickly during a session.

The transportations to the activity places such as to the University of Applied Sciences or to the multisport hall are adapted well for the advantage, since the groups usually walked to the activity places.

8.2 Issues to be developed

In Monituote adapted physical activity is firmly included to the weekly schedule. In spite of the fact that none of the instructors has professional knowledge of adapted physical activities, the activities seem to correspond somewhat well with the domains and goals of learning. Although essential goals were achieved the activities were not necessarily planned according to them. The most important goal for Monituote instructors is to give the workers a break for the day. This is an important goal and it is effectively being achieved but some goals might need more professional knowledge in order to notify.

Professional knowledge would be needed for practical things when instructing a physical activity group. For example in gym training the circuit stations should be timed equally, the adjustments for the devises should be correct, the alignments of the movements should not be incorrect and repetition should be considered. Unquestionably, some activity is better than nothing, but the sessions could easily be adjusted in order to be more effective. Equally, repetitions, alignments and stretching, which should be related to the movements, in the park gymnastic should be considered more.

In another hand, sometimes excellent goals are achieved without realizing it. For example in a simple activity such as in modified basketball the agility, vestibular and tactile functioning as well as one of the fundamental motor skills, throwing, are improved though the aim of the session might have been only to take a break from the work.

Mälkiä (2002, 6) notifies that in adapted physical rehabilitation the overall aim is to promote empowerment and quality of life. Although, the Monituote instructors are not professionals of this field and the activities are not always structured to meet all conceivable aims, the overall aim mentioned by Mälkiä, will most definitely be achieved. In addition, physical activity supports ability to work. The enthusiasm, urge and own experiences of the instructors are the lighter for organizing adapted physical activities. The workers participating to the activities definitely benefit from them and the threshold of being active also on pleasure time is lower. Monituote can be mentioned as a good example of a rehabilitation institution organizing adapted physical activities for their user without a professional of this field.

However, it should be also considered how to motivate the ones who are inactive, especially the young people. They are often the ones who would benefit from being active the most.

8.3 Evaluation of the research

Interview was chosen as an investigation method. The method served well, for the reason that the participants, including the author, were able to openly converse and the atmosphere was relaxed. Execution in a form of a theme interview gave the author a power to control the direction of the conversation and oppose additional questions.

The interview gave valuable information from each theme especially in relation to the instructors, the workers and rehabilitating work activity. When compared to the literature Monituote is a well up to date center doing work strongly from

rehabilitating point of view. Monituote personnel were all present and participated actively to the conversation. Corrections and additions to some issues were needed after the session. It revealed to be challenging to take only notes when interviewing a big group. Recording the interview would have been a more profitable option. Also without recording it is no easy matter to analyze and draw more deep conclusions or interpretations of the interview.

With the purpose of investigating more closely the adapted physical activities arranged in Monituote observation was used. Observation was necessarily when describing the adapted physical activities contrived. When participating to the activities the author was able to observe the participants, instructors and the function from a physiotherapist point of view. Photographing took place during the observation sessions.

From an ethical point of view the thesis was successful. The guardians of the adult with intellectual disabilities working in Monituote were asked permission for using the photographs. A requisition was sent to everyone's home. Only one declining answer was received but the person did not show in any picture. Also the fact that the term adult with intellectual disability is used gives ethical value to the study since it is the right term to be used.

The literature used for the theory part was up to date. Texts which were over five years old were chosen due to their importance for thesis and their knowledge which had not been obsolete.

In this thesis some conclusions concerning the benefits of adapted physical activities contrived in Monituote can be done. However, since the workers were not interviewed, issues, for instance, has the workers self- and body-image improved after exercising, cannot be determined.

8.4 Ideas for future development

The personnel of Monituote were truly interested and enthusiastic about contriving physical activities for their workers in spite of the fact that they did not have a professional background for it. Because of the lack of knowledge the activities were not planned according to a specific aim and they did not reach all conceivable goals of adapted physical activity. For this reason it would be profitable to arrange the personnel a course for organizing adapted physical activity and discover whether it gave them more confidence and readiness.

In this study only the personnel of Monituote were interviewed. There for the voice of the workers cannot be heard when reading the thesis. Also for the use of the instructors it would be beneficial to explore how do the workers experience the activities? Would there be something special what they would like to do? And how would it be possible to motivate also the ones who are not participating to the activities.

8.5 Own thoughts

Preparing the thesis was an educating and interesting assignment to carry out and it taught me a lot. The topic was pleasant for the reason that throughout my physiotherapy studies I have been interested in adapted physical activities and been a part of different projects in relation to that. Also working with adults having intellectual disability has been rewarding. Work with the associated partner Monituote has been uncomplicated and the centre was truly helpful. It has been a pleasure to do cooperation with each person in Monituote. A photo book created will become a part of their marketing and it will be used as a motivation tool to courage new workers to participate adapted physical activities offered.

The subject of the thesis did not arise from my own imagination, but was a work which was asked to complete. For this reason it has created some challenges with my work. In the beginning of the work a larger research and writing processes were

unfamiliar for me. As the work proceeded it came more and more obvious how important careful and well-aimed research plan is. However, piece by piece the thesis proceeded.

The area of the thesis was large, hence it had to be bound in the very beginning. Knowledge and information for the theoretical background were well available, though most of the literature was presented in Finnish. More theory concerning the functioning of and intellectually disabled adult would have been positive, in order to argue towards the benefits of APA and to get more dept to the work. However, limitations had to be done. I feel that I have been able to develop my skills of establishing observation, asking critical questions as well as thinking and writing reflectively.

REFERENCES

AAIDD. American Association on Intellectual and Developmental Disabilities. [Referred to on 17 May 2010] http://aaidd.org/content_2383.cfm?navID=2

AAIDD. American Association on Intellectual and Developmental Disabilities. [Referred to on 20 May 2010] http://www.aamr.org/content_100.cfm?navID=21

EUSAPA -European Standards in Adapted Physical Activities.[Referred to on 17 May 2010]
http://www.eusapa.upol.cz/web/index.php?option=com_frontpage&Itemid=83.

Hakala, J. 2004. Opinnäyteopas ammattikorkeakouluille. Helsinki. Gaudeamus.

Heikinaro-Johansson, P. & Huovinen, T. 2007. Näkökulmia liikuntapedagogiikkaan. Helsinki. WSOY.

Hirsjärvi, S. Remes, P. & Sajavaara, P. 2007. Tutki ja kirjoita. Keuruu. Otavan kirjapaino Oy.

Historic of Monituote. 2007.

Hyvärinen, M. Vesala, H & Seppälä, M. 2002. Työ- ja toimintakeskukset tänään. Kehitysvammaliitto ry. Helsinki. Hakapaino Oy.

Javanainen-Levonen, T. 2009. Rehabilitation preliminary survey/Case Finland/Satakunta region. Satakunta University of Applied Science and Health Care. Eusapa meeting in Gävle 22th June 2008.

Javanainen-Levonen, T. & Kärki, A. 2007. A Case Study from a Sport Pedagogical Perspective in the Bachelor-Level Training of Physiotherapists in Finland. In, P. Heikinaro & Johansson, R. Telama, & E. McEvoy (Eds.), AIESEP World Congress 2006 Proceedings: The role of physical education and sport in promoting physical activity and health (pp. 234-243). Jyväskylä, Finland: University of Jyväskylä, Department of Sport Sciences Research Reports No. 4.

Järvikoski, A. & Härkäpää, K. 2004. Kuntoutuksen perusteet. Helsinki. WSOY.

Kaski, M. 2009. Kehitysvammaisuus. Helsinki. WSOY.

Kaski, M. Manninen, A. Mölsä, P. & Pihko, H. 2001. Kehitysvammaisuus. Porvoo. WS Bookwell Oy.

Kehitysvammaliitto. 2009. [Referred to on 30.6.2010]. <http://verneri.net/yleis/kehitysvammaisuus/mita-kehitysvammaisuus-on/toimintakyky.html>

Kehitysvammaisten erityishuolto. 1977. 1977/519.

Kuntoutusselonteko. 2002. [Referred to on 31 May 2010]
<http://pre20031103.stm.fi/suomi/eho/julkaisut/kuntselonteko2002/kselte02.pdf>

Liikuntalaki. 1998. 1998/1054.

Mälkiä, E. Puolanne, M. & Palosuo, M. 1991. Erityisliikunta 1: Soveltavan liikunnan perusteet. Jyväskylä. Gummerus Kirjapaino Oy.

Mälkiä, E. & Rintala, P. 2002. Uusi erityisliikunta. Liikunnan sovellukset erityisryhmille. Tampere. Tammer-paino Oy.

Patja, K. 2001. Life expectancy and mortality in intellectual disability. Helsinki. Kehitysvammaliitto Ry.

Satakunta University of Applied Sciences. 2008. Instructions on writing bachelor's thesis.

Schalock, R.L., Buntinx, W., Borthwick-Duffy, S., Luckasson, R., Snell, M., Tassé, M., Wehmeyer, M. 2007. User's guide: Mental retardation: definition, classification and systems of support (10th ed.) American association on intellectual and developmental disabilities. Washington DC.

Seppälä, H. 2008. Kehitysvammaisten kuntoutus. In, Rissanen, P. Kallanranta, T. & Suikkanen, A. Kuintoutus. Keuruu. Otavan kirjapaino Oy, 507-521

Sherrill, C. 1986. Adapted physical education and recreation. A multidisciplinary approach. The United States of America. Wm. C Brown Publishers.

Steadward, R.D. Wheeler, G.D & Watkinson, E.J (eds.) 2003. Adapted physical activity. Edmonton. The University of Alberta Press.

Suomen perustuslaki. 1999. 1999/731.

The Ministry of Social Affairs and Health. [Referred to on 31 May 2010]
http://www.stm.fi/sosiaali_ja_terveyspalvelut/sosiaalipalvelut/kuntoutus

The Ministry of social affairs and health. 2009. [Referred to on 30 July 2010]
http://www.stm.fi/en/social_and_health_services/disability_services

Vesala, H., Numminen, H., & Matikka, L. Ikääntyvien kehitysvammaisten tuki-projekti. Kehitysvammaliiton selvityksiä 1. 2008. [net document]. [Referred to on 18 October 2010]
http://kehitysvammaliitto.fi/fileadmin/tiedostot/muut/pdf/tutkimusjulkaisut/kehitysvammaliiton_selvityksia_1_2008.pdf

WHO. World Health Organization. [Referred to on 25.5.2010].
<http://apps.who.int/classifications/apps/icd/icd10online/>

Winnick, J. 2005. Adapted physical education and sports. The United States of America. Edwards Brothers.

LIST OF APPENDICES

APPENDIX 1: EUSAPA preliminary survey

APPENDIX 2: Permission for the usage of photograph

Kartoitus: Erityisliikunnan osuus kuntoutuksessa

Yleinen tieto	
1. Maa: Suomi.....	
2. Laitoksen nimi:	
(suomeksi)	
3. (englanninkielinen nimi, jos mahdollista)	
4. Osoitetiedot:	
(katu, kaupunki, postinumero, maa)	
(sähköpostiosoite)	
5. Internet (jos olemassa):	
http://www.	
6. Laitostyyppi (merkitse kaikki sopivat)	
<input type="checkbox"/> sairaalan kuntoutusyksikkö tai osasto	<input type="checkbox"/> kuntoutuskeskus (ei vakituksia asukkaita)
<input type="checkbox"/> kuntoutuskeskus (asukkaita)	<input type="checkbox"/> muu, mikä:
7. Kohderyhmänne (merkitse kaikki sopivat)	
<input type="checkbox"/> lapset ja nuoret	<input type="checkbox"/> aikuiset
	<input type="checkbox"/> ikääntyvät
8. Merkitse asiakkaiden terveysongelmat (merkitse kaikki sopivat):	
<input type="checkbox"/> neurologiset	<input type="checkbox"/> sydämeen liittyvät
<input type="checkbox"/> hengitykseen liittyvät	<input type="checkbox"/> psykiatriset
	<input type="checkbox"/> muu, mikä:
9. Järjestetäänkö laitoksessanne liikuntaa? <input type="checkbox"/> KYLLÄ (siirry kohtaan 11) <input type="checkbox"/> EI	
10. Miksi liikuntaa ei ole järjestetty? (merkitse kaikki soveltuvat)	
<input type="checkbox"/> liikunta ei kuulu kuntoutukseen	<input type="checkbox"/> tilojen puute
<input type="checkbox"/> asiantuntijoiden puute	<input type="checkbox"/> välineiden puute
<input type="checkbox"/> taloudelliset syyt	<input type="checkbox"/> muu, mikä:
siirry kysymykseen 18	

11. Kuvaile laitoksesse liikuntaohjelmaa* (esimerkiksi neljä laajintaa):				
	Ohjelma I	Ohjelma II	Ohjelma III	Ohjelma IV
Ohjelman nimi				
Kohderyhmä				
Useus (kertaa/viikko)				
Osallistujien määrä				
Osallistujien prosentuaalinen osuus asiakkaiden määrästä				
Yhteistyö liikunnan järjestäjien kanssa	<input type="checkbox"/> virallinen yhteistyö <input type="checkbox"/> epävirallinen yhteistyö <input type="checkbox"/> ei yhteistyötä	<input type="checkbox"/> virallinen yhteistyö <input type="checkbox"/> epävirallinen yhteistyö <input type="checkbox"/> ei yhteistyötä	<input type="checkbox"/> virallinen yhteistyö <input type="checkbox"/> epävirallinen yhteistyö <input type="checkbox"/> ei yhteistyötä	<input type="checkbox"/> virallinen yhteistyö <input type="checkbox"/> epävirallinen yhteistyö <input type="checkbox"/> ei yhteistyötä

Tietoja liikuntaohjelmaa toteuttavasta henkilökunnasta		
12. Merkitse liikuntaa toteuttavan henkilökunnan lukumäärä:		
	Kokoaikainen	Osa-aikainen
Ammattilainen – vammaaton (esim. ohjaaja, valmentaja)		
Ammattilainen – vammaainen (esim. valmentaja, ohjaaja)		
Vammaaton vapaaehtoistyöntekijä		
Vammaainen vapaaehtoistyöntekijä		
Hallintohenkilö – vammaaton		
Hallintohenkilö – vammaainen		
13. Mikä on liikuntaa toteuttavan ammattihenkilöstön koulutusvaatimus? (merkitse kaikki sopivat)		
<input type="checkbox"/> fysioterapeutti	<input type="checkbox"/> liikunnanopettaja	<input type="checkbox"/> vapaa-ajan tutkinto
<input type="checkbox"/> erityisliikunnan tutkinto	<input type="checkbox"/> liikunnanohjaaja	
(erityisliik.ohjaaja tai opettaja)		
<input type="checkbox"/> muu, mikä:		
14. Onko liikuntaa ohjaava henkilö mukana kuntoutustiimissä?		
<input type="checkbox"/> KYLLÄ <input type="checkbox"/> EI		
Lisätietoja		
15. Miten liikunnan järjestäminen on rahoitettu? (merkitse kaikki sopivat)		
<input type="checkbox"/> vakuutus (esim. sairausvak.)	<input type="checkbox"/> sosiaaliturva (esim. Kela)	<input type="checkbox"/> muu, mikä:
<input type="checkbox"/> asiakkaat maksavat	<input type="checkbox"/> projektirahoitus
16. Onko liikuntabudjetti riittävä?		
<input type="checkbox"/> KYLLÄ <input type="checkbox"/> EI		
17. Mitkä ovat pääongelmat liikuntaohjelman toteuttamisessa? (merkitse kaikki sopivat)		
<input type="checkbox"/> kuljetukset	<input type="checkbox"/> tilat	<input type="checkbox"/> muu, mikä:
<input type="checkbox"/> henkilöstöpula	<input type="checkbox"/> välineet
<input type="checkbox"/> ajanpuute	<input type="checkbox"/> henkilöstön asenteet
18. Minkälaisia kehittämissuunnitelmia teillä on liikunnan järjestämisen suhteen?		
.....		
.....		
.....		

APPENDIX 2

VALOKUVAUSLUPA

Pori, Monituote 2.2.2010

Otan opinnäytetyötä tehdessäni valokuvia, joita saatan käyttää opinnäytetyöni kirjallisessa tuotoksessa, työn esityksessä tai valokuvakirjassa, jonka tulen kokoamaan

Allekirjoittamalla tämän valokuvauslupa-anomuksen todistan, että huollettavani valokuva saa esiintyä opinnäytetyön kirjallisessa tuotoksessa, suullisessa esityksessä ja kuvista koostetussa valokuvakirjassa.

Allekirjoitus ja nimen selvennys

Paikka: _____

Aika: _____