MOTHERS OF NEW-BORNS SEARCH FOR CONNECTION TO PHYSICAL ACTIVITY: AN ACTION-RESEARCH INTERVENTION STUDY

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ABSTRACT


People in today’s world are less and less physically active. Families do not have the time to do exercise and other hobbies, and one fifth of Finnish working aged people can be considered as sedentary. Therefore, interventions to promote physical activity are greatly needed. Deci and Ryan’s (1985) self-determination theory (SDT) stresses three needs for motivational behaviour: autonomy, competence and relatedness. Settings that support these three needs are said to nurture the most volitional and high quality forms of motivation and engagement for activities. Previous research shows that there are many different methods used to promote physical activity, and group-based interventions that incorporate social support and goal-setting have proven to be effective. Thus, the present study also incorporated ecological approach. The purpose of this study was to investigate lives of mothers of new-born babies. The aim was to plan, implement and evaluate an intervention to promote physical activity among mothers of new-born babies. This study used an action-research case study approach to intervene a group of mothers of new-borns. Intervention methods were team building, goal setting, social support and use of accelerometers, activity logs, and Polar Active -watches. Eight Finnish mothers participated to a yearlong intervention. All of the mothers had at least one child under the age of one. Group sessions were held approximately once a month, two hours at a time. Sessions were guided through different themes, such as use of time, social relationships, goal-setting and barriers to physical activity, as well as assignments were given according to the themes. Light outdoor walks were incorporated in the sessions as well. Support for autonomy played a big part in the intervention and the group sessions. Data for this thesis work was collected from researcher’s diary and informal, conversational interviews. Inductive content analysis was used to analyse the data.

Mothers learned to set short- and long term goals, manage their time more efficiently and how to incorporate physical activity and exercise to everyday life on their own terms. Five major themes emerged from the interviews: example to the child, exercising with important others, peer support, use of time, and everyday exercise. These themes described the connection of mothers to physical activity. The results revealed that the everyday life of a mother of new-born is hectic, filled with childcare and household activities. Mothers found that the use of time and time-management was a challenge in their lives. Thus, lack of time was perceived as one of the major barriers to physical activity. Current intervention provided the mothers peer- and social support that they perceived helpful and motivating. Changes in the way of thinking were noted as well, as the mothers started to think what kind of example they want to show to their children and what type of choices they make in everyday life, for example walking to the store instead of driving a car. It was concluded that intervention, which focused on the environmental, psychological and social needs of the mothers and understanding the situation that they are in, was perceived useful. Mothers of new-borns started to reflect on their use of time and physical activity goals.

Keywords: mothers of new-born, physical activity, intervention
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APPENDICES
1. INTRODUCTION

Research has shown that physical activity has a great positive impact on public health (Myers, 2008). Physical activity reduces the risks of cardiovascular disease, diabetes and depression, in addition it is a healthy way to treat excess weight and help to reduce the risk of getting other numerous chronic diseases (Dawson, Tracey, & Berry, 2008; Myers, 2008).

In spite of all the awareness of the positive health effects physical activity on people, Anshel (2007) points out that many seem to struggle with making time and effort to exercise regularly. Biddle, Soos, Hamar, Sandor, Simonek & Karsai (2009) found in their study that youth in Central-Eastern Europe have adapted more sedentary behaviours which includes, for example, television viewing. Pääkkönen (2010) noted that in families mothers and fathers experienced not having enough time to do activities that they wanted to do such as physical exercise, reading and art hobbies. In general European older adults have lower physical activity levels than what is needed for good health (Marques et al., 2011). More relevant to this current study, according to Husu, Paronen, Suni and Vasankari (2011) approximately half of the working aged Finnish do aerobic physical activity according to recommendations, but only one tenth of them practices the recommended muscle conditioning as well. Rovio and Pyykkönen (2011) point out that the challenge is that approximately one fifth of the working aged belongs to the “passive” or sedentary group. Therefore it is important that today’s and future health professionals are able to conduct interventions to help this up-and-coming problem in the western world.

1.1 Physical activity and sedentary behavior

Since this thesis is about mothers who take part in physical activity intervention, it is important to define few terms that are relevant to the topic. Physical activity is defined in terms of three elements: movement of the body produced by the skeletal muscles, resulting energy expenditure which varies from low to high and a positive correlation with physical fitness (Caspersen, Powell, & Christenson, 1985). Inactivity is understood as lack of activity. Sedentary behavior is closely related to inactivity and these two terms are often used to explain similar phenomena. However, there is some discussion
about whether inactivity and sedentary behaviors should be measured as separate items and therefore they should also be defined as separate (Rosenberg, Bull, Marshall, Sallis & Bauman, 2008). It should be suggested that the definition of sedentary behaviors should be more specific (Rosenberg et al., 2008). A proper definition would say that sedentary behavior is a distinct class of behaviors where the energy expenditure remains very low (Biddle & Mutrie, 2008). Therefore, sedentary lifestyle can be defined as a way of life where an individual engages in such class of behaviors, where their energy expenditure remains low, on a daily basis for several hours. It can be concluded that inactivity explains lack of activity in a broader sense, whereas sedentary behavior gives more detailed information of the behavior that has low energy expenditure.

1.2 Barriers to physical activity

Before we go deeper in to physical activity interventions, it is important to know the barriers to physical activity. And since the current study researched women, I am going to focus the barriers to physical activity more to women.

Studies show that physical activity plays an important role in promoting women’s health and disease prevention (Caperchoine, Mummery & Joyner, 2009). Physical activity has multiple beneficial health effects that can improve women’s health status (Caperchoine, Mummery & Joyner, 2009). Caperchoine, Mummery and Joyner (2009) also note that research has shown that women of all ages are less active than male. What are the possible barriers to physical activity in women then? Caperchoine, Mummery & Joyner’s (2009) study divided them to three categories: psychological and cognitive, sociocultural, and environmental factors. Psychological and cognitive factors were perceived lack of time due family and work responsibilities, low self-esteem and body image. Some of the sociocultural factors included finding affordable facilities to exercise in and finding a trained employee to look after their children. Environmental factors included such as safety of the environment, lack of organized programs and climate/weather.

According to Biddle & Mutrie (2008) there are five main types of barriers to physical activity: physical (injury/disability), emotional, motivational, lack of time, and
unavailability of sport facilities. Cerin, Leslie, Sugiyama, & Owen (2010) studied perceived barriers to leisure time physical activity (LTPA) in adults, and they observed that lack of motivation, poor health and lack of facilities were associated with the odds of non-participation in LTPA. Women in Norway perceive higher number of barriers than men (Sørensen & Gill, 2008). Sørensen and Gill (2008) also reported that women in Norway take a large responsibility of house and family activities, which might explain that women perceive more priority barriers than practical barriers. Family is often prioritized before exercise and physical activity. In addition to all the barriers mentioned above, Zlot, Librett, Buchner & Schmid (2006) found a social capital barrier that was consistently related to physical activity levels. Their study suggests that social support plays a vital role in being physically active.

1.3 Self-determination theory

There are several theories that can be used as a basis to plan an intervention to motivate people to become more physically active. Anshel (2007) names different theories and models that have been effective in the field of exercise psychology: health belief model, theories of reasoned action and planned behavior, self-efficacy theory, information-motivation-behavioral skills model, transtheoretical model, and the disconnected values model (DVM). The main theory that this study follows is Deci and Ryan’s (1985) self-determination theory (SDT), because this theory defines the exerciser’s perception of high self-control and the force of intrinsic motivation.

SDT represents a broad framework for the study of human motivation and personality (Deci & Ryan, 1985). According to SDT motivated behavior is aimed at satisfying three basic needs: competence, autonomy, and relatedness. Competence refers to the need for producing behavioural outcomes and understanding the production of these behavioural outcomes. Autonomy refers to the need for experiencing oneself as an initiator and regulator of one’s actions. Relatedness refers to the need for experiencing satisfactory relationships with others and with the social order in general (Deci & Ryan, 1991). The theory also operates with three basic types of motivation: extrinsic motivation (directed by external rewards), intrinsic motivation (directed by the sake of activity itself with no external rewards) and amotivation (Deci & Ryan, 1985). External motivation refers to the doing of an activity for outcomes that are separable form the activity itself, and
internal motivation refers to the doing of an activity for its inherent satisfactions rather than some separable outcomes (Ryan & Deci, 2000).

SDT also focuses on how social and cultural factors enable or undermine people’s sense of decision and initiative, in addition to their well-being and the quality of their performance (Deci & Ryan, 1985). Settings supporting the individual’s experience of autonomy, competence, and relatedness are argued to nurture the most volitional and high quality forms of motivation and engagement for activities, including enhanced performance, persistence, and creativity (Deci & Ryan, 2000). In addition SDT proposes, that if these three psychological needs are unsupported within a social context it will have a strong negative impact on wellness in that setting (Deci & Ryan, 2000).

1.4 Ecological models of health behaviour

Sallis, Owen, and Fisher (2002) wrote a chapter about ecological models of health behaviour that gives the reader a good understanding on what is meant by the ecological models and what would be the best way to apply it to intervene individuals and their behavior. The core concept of an ecological model is that behavior has multiple levels of influences that can include biological, psychological, social, cultural, organizational, community, physical environmental, and policy (Sallis et al., 2002). Sallis et al. (2002) propose four principles of ecological models of health behavior: 1. multiple levels of factors influence health behaviour, 2. influences interact across levels, 3. multi-level interventions should be most effective in changing behavior and 4. ecological models are most influential when they are designed as behavior-specific. These four principles explain how an effective intervention should be planned. The first principle means that in order to be most influential, for example changing physical activity, one should consider sociocultural factors and physical environment that may apply to more than one level. Physical environment applies to natural environment (i.e. physical activity facilities and programs, weather, neighbourhood etc.), social cultural environment (i.e. social support, clubs, teams, organizations, groups) and information environment (i.e. mass media, internet, electronic entertainment etc.) It is stressed that change in behaviour is expected to be exploited when environments and policies support healthful choices, when social support for healthful choices is strong and when individuals are motivated and educated to make those choices (Sallis et al., 2002).
The chapter written by Sallis et al. (2002) tells the reader that it is very time consuming and difficult to implement an intervention that is based on ecological models. They mention how it takes time to change policies and these kinds of changes require a political process. Nevertheless, applying a range of forces (i.e. behavioural, environmental, social, and informational) to change behaviour is much more powerful than only applying one or two levels (Sallis et al., 2002). In addition, we should create environments and policies that make it convenient, attractive and economical to make healthy choices (Sallis et al., 2002).

1.5 Interventions

Since inactivity and sedentary lifestyles, and the health effects of them, have become more and more relevant in today’s societies in many parts of the world, it can be said that interventions to promote physical activity, exercise and healthy lifestyles are greatly needed. There have been studies done on different groups of people who are inactive or sedentary, for example children, young adults, working adults, and elderly. In addition, the distinction between males and females has been taken into consideration when looking at some of the studies done on inactivity and interventions for inactive people.

Researchers, health professionals and educators have used various ways to attempt to promote and change physical activity behaviors in order to improve peoples’ wellbeing and health. Interventions such as playgroup-intervention (Jones, Burns, Howat, Jancey, McManus, & Carter, 2010), possible selves-intervention (Murru & Martin Ginis, 2010), web-site-intervention (Irvine, Philips, Seeley, Wyant, Duncan, & Moore, 2011), distance physical activity intervention (Jenkins, Christensen, Walker & Dear, 2009), physical activity counseling intervention (Hall, Crowley, Bosworth, Howard & Morey, 2010) and pedometer intervention (Zoellner, Connell, Powers, Avis-Williams, Yadrick, & Bogle, 2010) have been used to study any behavioral changes in physical activity levels. In addition to the listed intervention strategies there are more out there that has been used. This list illustrates a few interventions that were studied and proven to be somewhat effective.
Jones et al. (2010) conducted a qualitative study where they researched groups of mothers with young children. In this study the researchers interviewed mothers who participated in playgroups in order to find the best possible intervention to increase physical activity and change eating habits for groups of mothers with young children. After interviewing the mothers and carefully reviewing the data, it was concluded that the best way to increase physical activity of this type of groups would be to use an intervention strategy with an approach that engages the whole family or at least the mother and the child. For example physical activity sessions where the children could participate with the mothers, such as dance lessons, were discussed among the mothers in Jones et al.’s (2010) study. This type of intervention allows not only the mothers to exercise but also the children. It also gives them an opportunity to engage socially with other mothers and children.

Rasinaho, Hirvensalo, Törmäkangas, Leinonen, Lintunen, and Rantanen (2011) used motivational interviewing as a counseling method to intervene Finnish older adults’ physical activity levels. The 2-year telephone-assisted randomized, controlled intervention study showed that counseling was effective in initiating new physical exercise. Additionally it showed that the positive results were still evident at the post-intervention follow-up. The main element of motivational interviewing is to encourage personal intent to change (Miller & Rollnick, 1991). In this method, the counselor’s purpose is to listen, reinforce and give clues to the sought-after behaviour (Miller & Rollnick, 1991).

Internet based interventions for changing and promoting health behaviors is a research area that is increasing (Norman, Zabinski, Adams, Rosenberg, Yaroch, & Atienza, 2007). Irvine et al. (2011) developed and tested a web site to promote physical activity among sedentary groups of people. This intervention strategy used a web site to provide information and support to develop personalized physical activity plans for inactive workers. The results showed that the web site had a positive effect on the physical activity status, motivation, self-efficacy and intention of the workers. Even though internet interventions are arising and becoming more relevant, it is good to remember that this type of interventions are still in the development, and therefore they should be more researched and evaluated (Norman et al., 2007).
Whereas internet based interventions act as so called distance physical activity interventions (Jenkin et al., 2009) some different approach can also be helpful to enhance physical activity, such as physical activity counseling intervention (Hall, K. Crowley, Bosworth, Howard, & Morey, 2010). Hall et al. (2010) introduced an intervention for a large group of veterans incorporating group meetings for goal setting, counseling phone calls that promoted individual efficacy and motivation, and individual progress reports. The results of this study were positive. The individuals who participated in the study improved significantly in their health-related-goal status and their physical activity levels increased.

Pedometers and accelerometers are devices that measure physical activity in steps and in speed or acceleration. Several studies have been conducted where these devices are used to measure physical activity but also as an intervention approach in order to enhance individuals’ physical activity levels. Wearing a pedometer and writing a walking diary can act as a motivator for staying physically active (Zoellner et al., 2010). Zoellner et al.’s (2010) study investigated changes in physical activity behavior after using a pedometer and writing a walking diary over a period of six months. This study’s results suggested that this type of intervention approach is viable and can show positive results when it comes to enhancing individuals’ physical activity levels. Moreover, Ottevaere, Huybrechts, De Meester, De Bourdeaudhuij, Cuenca-Garcia, & De Heneauw (2011) concluded in their study that when using accelerometers in an intervention, it is very important to include activity diaries to go along with it to ensure the most accurate information about individuals’ activity levels. When an accelerometer only is used to measure individuals’ physical activity levels it can give misleading information, and therefore using the activity diaries is important because they give more information about what, where, why and with whom something was done at an individual level (Ottevaere et al., 2011). It can be said that just like the combination of pedometers and activity diaries in an intervention, the combination of accelerometers and activity diaries can act as motivators for individuals to be more physically active.

As can be noted, there is a multitude of intervention approaches out there for exercise psychology professionals and researchers to use when approaching peoples’ sedentary lifestyles and inactivity. De Meester, van Lenthe, Spittaels, Lien and De Bourdeaudhuij (2009) did a meta-search on different interventions for physical activity and they found
them to be in various categories. There are several interventions for children that can be delivered through school settings. Other interventions can be conducted in a community or primary care setting (De Meester et al., 2009). In addition, as was mentioned above, internet based interventions are out there as well in order to help people to engage more physically active lifestyles (De Meester et al., 2009; Irvine et al., 2011; Norman et al., 2007). All of these approaches have proven to provide positive outcomes. However there still remain the questions of what kind of intervention approach should be used to gain the most effective results and what sort of intervention guarantees the long term health results that everyone seeks for.

This chapter showed many different intervention methods to promote physical activity, and we can note that most promising methods in interventions to promote physical activity are social support, goal-setting, and use of accelero- or pedometers. Therefore the following two chapters go deeper into describing the importance of social support, relationships, group processes and goal-setting in the physical activity intervention methods.

1.6 Social support, relationships and group processes

The following paragraphs describe areas and topics that can be considered when planning an intervention for sedentary and inactive individuals. They relate to social support, relationships and group processes.

Social support can play an important role in getting individuals back to being physically active and maintaining their healthy lifestyles. Biddle and Mutrie (2008) have stated that: “…from the point of view of the correlates of physical activity, we are defining social support in motivational terms in respect of the social influence of people on the physical activity patterns of others” (p.145). Biddle and Mutrie (2008) further noted that there are three types of social support that can influence one’s behavior namely emotional, informational and material (instrumental) support. Emotional support can be described as, for example, empathy from others in one’s attempt to be physically active (Biddle & Mutrie, 2008; Vrazel, Saunders & Wilcox, 2008). One can feel the support of having someone on their side. Informational support can be explained as information or advice that is given by others regarding exercise (Biddle & Mutrie, 2008; Vrazel et al.,
A person could get details from a friend about exercise classes held at a local club, for instance. Lastly, the material or the instrumental support can be described as direct help, such as getting a ride from their spouse to the local gym, or getting a set of free weights as a gift from a friend (Biddle & Mutrie, 2008; Vrazel et al., 2008).

In order to receive social support from others, an individual should have a network of people that forms special relationships with them. Children’s physical activity levels are related to social support, peer-modeling and encouragement (Hardman, Horne & Lowe, 2011). Ullrich-French and Smith (2006) conducted a study that revealed that attachment relationships, such as friendships, parents and romantic partners, were relevant to physical activity motivation. Additionally, Hsu, Chou, Nguyen-Rodriguez, McClain, Belcher, and Spruijt-Metz, (2011) reported that in their study the results showed that social support can strongly influence an individual’s moderate to vigorous physical activity (MVPA). In addition, the results revealed that social support has a strong influence on individual’s sedentary and light behavior (SLB), whereas Hsu et al. (2011) observed that negative meanings of physical activity (NMPA) were associated with low social support. This means that people who are close can most likely influence an individual positively in staying physically active by giving them the social support. Similarly, for instance Amomir, Azevedo and Hallal (2010) stated in their study that:

“A consistent result of our study was the positive role of social environment at influencing physical activity levels, a finding that is in accordance with several studies. Such a finding is promising in terms of public health; future interventions may either promote group physical activities or offer spaces in which social networks can be constructed.” (p.209-210)

It is also relevant to say that people who see other people to exercise or being physically active are more likely to engage in exercise themselves (Amomir et al., 2010). Vrazel et al. (2008) underline the fact that there is a need for interventions for women who are sedentary. There are several social-environmental factors that influence women and their physical activity behaviors, such as emotional, tangible, and informational support, as well as life transitions, multiple roles, cultural standards and gender-role expectations (Vrazel et al., 2008). Fjeldsoe, Miller and Marshall (2012) concluded in their study that social support for physical activity should be targeted in the future interventions for postnatal women. In reviewing the findings from previous research it is clear that future
health and exercise psychology professionals should implement interventions that focus on building such factors in social environment as relationships, social networks, and social support which are inherent in that type of environment.

Group processes, social support and sense of belonging are closely entwined. Group processes include activities that are done with other people as a group. As Rovio, Lintunen and Salmi (2009) stated, humans have a need to belong and feel closeness to some sort of community. A community can be thought of as a group. Shared activities create communality (Rovio et al., 2009). Similarly, Hale, Hannum and Espelage (2005) stated that in their study “Belonging was the only variable that directly predicted health, and this was a small prediction for both women and men. The availability of a social network (a sense of belonging) influenced women’s health perception” (p.281). Burke, Shapcott, Carron, Bradshaw and Estabrooks (2010) mentioned that there is a bundle of research that shows that a group membership is associated with enhanced adherence and compliance behaviors. It is also stated that group based interventions are superior to individual based and internet based interventions (Burke at al., 2010).

It can be challenging to create an intervention for people who are inactive or who have a sedentary lifestyle. There are many issues that need to be taken in to consideration when starting to plan an intervention to enhance physical activity and promote healthier lifestyles, but it can be noted from the findings of the previous research that interventions that are group based, incorporate social support, social network and create a sense of belonging could be effective.

1.7 Goal-setting

Goal-setting is a method that is used a lot in sport psychology and mental skills interventions for athletes. In addition to athletes it is widely used in exercise psychology settings, such as physical activity interventions, and it has the potential to be an important facilitator of behavior change (Shilts, Horowitz & Townsend, 2004). As a method used in interventions, goal-setting has often been found to be effective as a short-term behavior change strategy (Biddle & Mutrie, 2008; Weinberg & Gould, 2003). Simply put, a goal is a target or a specific achievement that a person attempts to attain (Vealey, 2007).
Weinberg and Gould (2003) stressed that having moderately difficult goals, having both short- and long-term goals, the presences of feedback on progress toward goal attainment, specificity of goals, public acknowledgement of goals, commitment to goal attainment, participant’s input in the goal setting process, and use of a combination of different goals will most consistently enhance the effectiveness of goal setting in sport and exercise psychology environments. A physical activity intervention is considered as an exercise psychology environment. And in these types of environments, health professionals should review the participants’ goals, show interest about their progress by asking them, empathize with any occurring struggle they have and foster a caring upbeat and encouraging atmosphere (Weinberg & Gould, 2003). Weinberg & Gould (2003) explain a good tip for helping athletes and exercisers to remember characteristics of effective goal-setting, which is remembering the word SMART. S stands for specific (goals should indicate exactly what is to be done), M is for measurable (goals should be able to be quantified), A stands for action oriented (goals should indicate something that needs to be done), R is for realistic (one should make sure that the goal can be achieved), T is for timely (goals should be achieved in a reasonable time and the last S stands for Self-determined (goals should have input from the participant themselves).

Fjeldsoe et al. (2012) conducted an intervention study for postnatal women in order to improve physical activity level by social cognitive mediators such as barrier self-efficacy, goal-setting skills, outcome expectancy, social support and perceived environmental opportunity for exercise. This study found that goal-setting skills had a strong intervention effect on initial change and in the study’s discussion it was noted that it is important to conduct more studies and interventions with postnatal women that incorporate goal-setting skills. A review done by Shilts et al. (2004) proved that goal-setting has shown promised in promoting dietary and physical activity behavior change among adults. They concluded from the studies they reviewed that “maximizing the ability to observe a positive goal-setting effect includes designing a study with the following components: goal-setting effectiveness research focus, fully supported goal setting, ample sample size supported by power calculation, and use of goal-setting theory to design goal-setting support” (Shilts et al., 2004).
As a summary it is important to mention that in the research field of physical activity, inactivity, exercise psychology and physical activity interventions some of the areas are more researched and known about, for example barriers to physical activity. On the other hand, a lot of targeted physical activity interventions have not been yet done, and especially interventions to promote physical activity to target mothers of new-born could not be found. Therefore this study is greatly needed in the field of exercise psychology.
2. PURPOSE OF THE STUDY

The purpose of this study was to investigate lives of mothers of new-born babies. I wanted to discover their connection to physical activity and the factors that influence it during an intervention study. In addition I wanted to develop ideas for future interventions that target mothers of new-born.

The aim was to plan, implement and evaluate an intervention to promote physical activity among mothers of new-born babies.

More in detail, the aim was to:

a) Study the implementation of the intervention and possible barriers and phases of learning and change among the participant mothers.

b) Describe the experiences of the mothers about the programme.
3. METHODS

3.1 Researcher’s background

My personal background is heavily related to sports and I felt in the beginning of my master’s studies, that I would like to gear my thesis more towards the sport psychology issues than the issues in exercise psychology. I felt more interested in that side of studies. I have a background in playing basketball competitively until my early 20’s, and due to the active participation in sports I suffered serious knee injuries, followed by surgeries and rehabilitation processes. My bachelor’s studies focused on the sport medicine and I wrote my senior exit exam about the psychological side of being injured in sports. This past experience led me to gear more towards the issues of sport psychology when it was time to start to think about thesis topics. At that time I had no clue that this was going to change entirely. Currently I work as a fitness instructor and every day I see people who are very active and exercise a lot, but at the same time my clients come to talk to me about struggling to hold on to the exercise routines and healthy lifestyles.

I had told myself to keep my mind and options open, no matter how much I wanted to stay in the sport side of things. There was a sudden chance to become a part of a big research project for Likes (Foundation for Sport and Health Sciences). The project was called Liikuntakynnyksen yli (Over the barrier of physical activity) and its principal researcher, Esa Rovio, needed a person to lead an intervention group in Tampere with him. And there it was: my flip from sport psychology to exercise psychology, when it came to my thesis topic. Come to think of it later, I am very pleased that I took this opportunity, because I believe that this type of research is needed and there is a big need in the applied side as well. I felt that I was doing a meaningful work in this project. In addition, I learned a lot about how to increase physical activity especially in a focus group like we studied.
3.2 Research design

This study used an action research, case study approach to gather information about a group of mothers of new born babies. Action research does not follow a typical linear pattern or it does not use a single method. It uses multiple ways to gather information, and it has many actions and reflective processes to face problems and issues (Heikkinen, Rovio, & Syrjälä, 2007; Tuomi & Sarajärvi, 2002). This action research approached the participants with group session intervention, where the participants discussed about their life situations in being mothers of new-born. In addition, different assignments were done in the group sessions to illustrate the reality of the mothers’ everyday life and their connection to physical activity or the lack of it. Physical activity measures were taken with the help of accelerometers, activity logs and Polar Active –watches. In this report, a researcher’s diary and interviews with the participants have been utilized to gather data to give the reader a best possible understanding of the process of the intervention and the process of the participants. The design of this study comes close to pedagogical action research, an approach that is also described by terms such as classroom action research, teacher research and curriculum research, where the researcher is an internal researcher among the participants and the target, or so called, a “living research tool” (Heikkinen et al., 2007). This research design considered different aspects that are important in physical activity interventions such as psychological, social and physical aspects. Psychological aspect came from Deci and Ryan’s SDT (1985) and goal-setting methods. Social aspect was fulfilled with the regular group sessions where the participants were able to meet their peers. And the physical aspect came from the outdoor walks and the measurements of the accelerometers, activity logs and Polar Active -watches. This type of research design was helpful in investigating the lives of the participants, because the discussions and assignments led directly to the participants’ lives. In addition, this research design was helpful in evaluating the implementation of the intervention because it used different methods and had an ecological approach with multiple levels (Sallis et al., 2002).

3.3 Participants

Eight mothers were recruited to this study through a magazine add. Prerequisite to participate the study was to have at least one child under the age of one. In addition, the
mothers had to be stay-at-home mothers when the intervention started. Five of the participants had only one child, one of them had two children and two of them had three children. During the intervention period, one of the participants gave birth to her second child. Seven out of eight participants had spouses and one of the participants was a single mother. The age range of the mothers was 27-40 years. All the mothers are highly educated. The mothers shared a common phase of life by being a stay-at-home mother of a young child or children. Pre-intervention measures of accelerometer data showed that this group took part in only light physical activity during the days they wore the accelerometer (Green & Novoradovskaya, 2012).

3.4 Setting and group sessions

The intervention took place for one year (February 2011 to March 2012), where the participants and the researchers met at Varala Sports Institute approximately once a month, for two hours at a time, as a group, altogether 13 times. The setting provided the participants a safe and secure environment to meet as a group to discuss about their life, matters related to their inactivity and their use of time. Researchers guided the discussions through different themes.

Each session was carefully planned by Esa Rovo (principal researcher), Liisa Lautamatti (retired Emeritus English professor) and me. Intervention methods were team building, social support and goal setting. In addition, accelerometers, activity logs and Polar Active–watches were used to measure physical activity, but also to motivate to be more physically active. Different themes such as goal setting, relationships and use of time in everyday life were incorporated. Purpose of the themes was to encourage discussion and help the mothers to find new ways and methods to become more physically active. Discussions mainly focused on the everyday lives of the mothers, and what being physically active meant for them and how it is, or if it is at all, present in their lives. Each session started with a “beginning round”, where each participant briefly described from what situation they had come to the meeting that day. Each session finished with an “ending round”, where each participant could share their thoughts about their feelings of leaving the group on that particular day. In between the “beginning round” and “ending round”, along with discussions, different assignments and exercises were done too. In addition, some walking in the nearby forest was incorporated to the
intervention group sessions. During the walks, the participants discussed about the assignment that was previously given to them, and that was reflected upon after the walk. Purpose of the assignments and exercises were not only to guide the participants in the discussion but also to assist the grouping process, and the aim was that the group would support the participants to become more physically active. The counselling method in this intervention was based on the sociodynamic counselling method (Peavy, 1998). The content of each intervention meeting is shown in the appendix.

3.5 Measures

During the intervention, several methods were used to gather data. For this thesis, two of them are analysed in order to provide readers as coherent understanding of the action research process as possible, and to describe the participants’ experiences in the intervention.

Researcher’s diary was used as a tool to provide an understanding of what was done in the intervention, and deliver knowledge of the process from the researcher’s point of view. Diary was written after each intervention session and on any occasion the researcher felt it was necessary. Informal, conversational interviews were used to provide information about the participants’ connection to physical activity and their point of view of the process in this action research. Interviews lasted between 18 to 32 minutes and they were conducted in October 2011, in the beginning of the second half of the intervention. All the interviews were conducted in Finnish.

3.6 Analysis

The implementation of the intervention is described in detail and along a timeline during the year. Phases of learning are extracted from the story, which reminds a narrative approach (Chase, 2005). Audio recordings of 8 interviews were transcribed verbatim. All in all the transcribed data consisted of 77 pages with the font size of 12, double spaced in Times New Roman font. Inductive content analysis was used to analyse the interviews. The data was read through repeatedly in order to reach a full understanding of each participant’s point of view and to find relevant themes.
Researcher’s diary was also read to reflect on the research process and to find reflections or quotations that would support the themes that arose from the interviews.

Five main themes emerged from the informal, conversational interviews. These were: example to the child, exercising with a friend/spouse/group, peer support, use of time/time schedule, and everyday exercise/exercising with the child. Each theme is illustrated by extracts from the interviews and by researcher’s experiences from the intervention group meetings. Table 1. demonstrates the emerged themes.

Table 1. Main themes

<table>
<thead>
<tr>
<th>Themes</th>
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<tr>
<td>Example to the child</td>
<td>Exercising with important others</td>
<td>Peer support</td>
<td>Use of time</td>
<td>Everyday exercise</td>
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3.7 Ethical questions

All the participants signed a consent form for research. It was made clear for all of the participants that they could withdraw from the study at any point they felt like it. In addition the identity of the participants and all the others (for example the family members of the participants) in the interviews have been excluded to support the anonymity.

3.8 Trustworthiness

Triangulation was provided by using the researcher’s diary and the data from the interviews to study the same matters, which provided different points of views and give more trustworthiness to the study. Member checking was done so that the results section of the thesis was sent via email to all of the participants and asked if they could read it and answer questions: “Is the story truthful? Would you like to add or delete something? Would you like to comment on it?” One of the participants replied and said that the story was truthful.
4. RESULTS

The results of this thesis are organized in two parts. The story of the intervention is based on the researcher’s diary, which provides an understanding of all of the meetings in the interventions and illustrates my, the researcher’s, point of view. The interviews provide the point of view of the mothers and their experiences.

4.1 Story of the intervention: what was done?

It all began in early February, 2011. Esa Rovio had asked Taru Lintunen about any willing students for his research project in helping to lead one of the intervention groups for mothers who were not much physically active due to their life situation. He needed someone quickly to start one of the groups in Tampere and I was willing to jump on board. We had couple of meetings before the first intervention session, where we discussed about the entire project, its goals and the basis of the group I was going to lead. I remember being excited to take over a new challenge, but at the same time I felt nervous and a bit insecure. Did I have the ability and competence to do all this work?

First meeting

The first intervention session was held in February 15th, 2011. We met in Varala Sport Institute, in one of their class rooms that had an amazing view to the Lake Pyhäjärvi. The space was small, intimate and had a lot of natural light. These were my initial observations of the space and I felt that it was important to have a good feeling of the space where we were going to intervene and research group of mothers’ lives. All of the mothers were able to come to the first meeting. Mothers were a bit reserved but curious about other mothers since they immediately started to discuss to each other and ask about their children and families. But still one could sense that these women did not know each other beforehand. Everyone was just patiently waiting to hear what was going to happen. Esa and I introduced ourselves and we told the purpose of that day’s meeting. We let everyone to write down their names on a piece of paper and in addition they wrote down if they had a spouse, how many children they had and their ages, and their residential area. They could keep that paper close to them for everyone to see, and it allowed everyone to connect to everyone’s life and living situation. All the mothers
introduced themselves. After the introductions everyone could briefly tell from what situation they had come to this session. This gave us researchers an idea of what was happening in each participant’s lives and how everyone was feeling that day. This so called “beginning round” was incorporated in every meeting we had, and we felt that it was useful in assessing everyone’s situation at given moment.

After hearing everyone’s situation, it was noted that all of the mothers came to the meeting from a hectic situation. One of the mothers said that she almost forgot to come to the meeting in the mist of all the household work and another said that she could barely say hello to her husband because she was in such a hurry leaving to the meeting. All the mothers seemed tired too: couple of them discussed how little sleep they had gotten the past night and everyone mentioned about days being full of activities related to childcare or household chores. No wonder that these mothers seemed tired, everyone’s youngest child was aged in between 2 to 10 months at this time, which meant that majority of their energy went to taking care of their new-born child.

As this was our first meeting and beginning of the intervention, it was important to express what we, Esa and I, were expecting from the participants and we also wanted to ask their expectations. The rules of the group were discussed as well. Esa and I wished that all the mothers participated in all of the meetings and if for some reason, they were unable to attend, they would inform me beforehand. All of the mothers expressed that they wanted to find a new motivation to exercise, and one of the mothers said that she would like to get some new ideas on how to exercise with a small baby. It was also mentioned that they wished to find own time to exercise without feeling any guilt from being apart from their family.

Before we moved on to more active and conversational phase of the meeting, Esa informed about the pre and post measurements that we were going to do during the intervention. Accelerometers and time logs were given to all of the mothers. Mothers were instructed to use the accelerometers at least for 7 days, possibly 10 days and keep a time log for three days. In the time log they would write down all of their activities during the entire day. Time logs were instructed to be filled from two weekdays and one day from a weekend. This allowed researchers to evaluate whether the activities during the weeks and weekends varied.
We wanted to keep the first meeting simple and let the mothers to get to know each other. We did have some extra time to spare, which we utilized for an assignment. Assignment was titled as “my group membership”. In this assignment the mothers were instructed to draw and write groups that they belonged to in their lives and illustrate people that are important to them and in their lives. It was quite obvious that the nuclear and heart in all of these mothers’ lives was the family, their spouses and children. Some had drawn groups of friends and friends from hobbies and some had close links to their parent and the parents of their spouse. And one even mentioned that it was hard to create new social groups and connections after moving to a new city.

The first meeting was ended with “an ending round”, that allowed the participants to express their current feeling in leaving the meeting. All of the mothers had a good feeling and some even said that it was nice to see how well the group got along. I remember leaving the first meeting with a relieved feeling. I was also a bit anxious, because I remember thinking during the meeting that I should give these mothers advice and answers. I expressed my anxiety to Esa after the meeting and he told me that the idea of the meeting was to let the mothers to talk and us to listen, we did not want give them concrete advice on how to exercise or do things in their lives, and we let the mothers to ponder answers themselves to their issues. This gave me much more confidence to go to the next meeting.

Second meeting

It felt like three weeks flew by after the first meeting. Before the second meeting Esa and I met with Liisa Lautamatti, who helped us to plan the meetings with more structured and cohesive way. We started to use Liisa’s template to plan courses and classes. Each meeting was constructed accordingly: beginning, transition, work and ending phases. This construction helped us to plan and follow our plan during the meetings. Copies of the plans (in Finnish) can be found from the appendix. After getting advice from Liisa, I felt so much more confident going to the second meeting, which was on the 8t of March, 2011.
The second meeting was started with “the beginning round”, and once again it seemed that everyone had come to the meeting in a hurry and some were thinking how the husbands were doing with their little ones at home. In the transition I told the agenda of the meeting and we would go over the dates for the future meetings. In this meeting we wanted to discuss about the accelerometer and time log usage and experiences, and the mothers were able to have a look at their results from the accelerometers. We also incorporated an assignment where the participants got to think about their group relationships in pairs. And lastly each participant thought a short term goal for themselves in relation to physical activity and exercise.

This meeting gave the mothers an opportunity to reflect their everyday activities by seeing their accelerometer data and viewing their time logs. It was mentioned that a mother’s day is filled with childcare activities and household chores, and the mothers discussed how much time dressing and undressing the baby took during the day. Mothers also discussed how the time log helped them to see that their time is really limited to their child and finding time to exercise could be difficult.

Goal setting was a major intervention tool and it was incorporated to almost every meeting during the entire year. Mothers got to evaluate and rethink their goals according to their life situation and what had happened in between the meetings. We wanted the mothers to set their first short term goals already in the second meeting. It was interesting to hear what type of short term goals these mothers would set for themselves, since we knew that their lives were busy in taking care of their children and household. Many of the mothers said that they would do some type of exercise once a week. One of the mothers said that she would contact another mother (she was part of the group) at least once before we have our next meeting and ask her for a stroller walk. One of the mother’s short term goals was to ask her sister to make her an abs-workout plan. Idea was that everyone would say their set goals out loud, which would maybe create a positive and healthy type of peer pressure. The meeting was ended with “the ending round” to reflect on everyone’s feelings before leaving.
**Third meeting**

In April 12th, 2011 we had our third meeting. We prepared our plan for the meeting according to Liisa Lautamatti’s suggestions, and using the course plan template was noted to be very helpful. In this meeting we wanted to gear the discussion towards the topic of use of time. Second topic of discussion was the method of the intervention. In addition mothers got to evaluate their short term goals that they set in the previous meeting and they also got to set new ones. And before ending the meeting we handed the mothers two Polar Active watches to each participant that they got to use for couple of weeks and give the other one to a friend, spouse or other family member.

This meeting had a lot of substance in it and I remember how managing the time during the meeting was a challenge. Luckily everything that we wanted to accomplish was accomplished. After the beginning round and all the practical information about schedule and such was done, we handed out each mother a copy of their time logs and we wanted them to reflect on their thoughts and feelings about their use of time. We divided this exercise into three parts: first everyone got to work alone and explore their logs and write down their thoughts, after five minutes mothers paired up where they continued their discussion and shared their thoughts for approximately 10 minutes, and in the last and third part each pair would tell the entire group their 3 main issues or topics that came up in the discussion. Everyone agreed that the majority time is spent at home and with the child or children. Some of the mothers started to discuss about when to recover. There is so much to do during the day that it seems that there is no time to recover and take time to relax.

It was essential that we consider the participants’ ideas and wills about the method of the intervention. We asked the mothers that what were the factors that have an influence on them coming to these meting or what factors support them to be part of this group, and what would they like to do in the meetings. Once again we divided this exercise in to individual reflection, pair discussion and group discussion. We made sure that everyone got heard. As a result of discussion we decided to incorporate some outdoor walks to the next meeting. All the mothers agreed that it is nice to come to this type of meetings where they know that each of them are in same, or very similar, type of life situation and they can share their issues get the needed peer support from one another.
Everyone got to tell their previously set short term goal, whether it was reached and what did they learn from it. Almost everyone had to reassess their goal since it seemed to be challenging to reach. During the walk, it was discussed how difficult it was to find separate time to go to the gym or arrange schedules so that someone else was looking after the children. Someone mentioned how their life is not that spontaneous anymore, everything has to be planned well beforehand. Mothers’ own time seemed to be very limited if it existed at all.

Handing out the Polar Active watches was supposed to give the mothers some new type of motivation to evaluate their activities during the days, and maybe give them a small boost to become more active. Giving two watches to everyone was expected to have the mothers to think maybe someone who would support them getting more active and they could share the experience of wearing the watches together. Idea was to get them to see and monitor their activity levels differently and maybe help them to get a new spark to think of ways to be more physically active.

The ending round revealed how everyone got very excited about the Polar Active watches. They started to think people whom to give the second watch to. After meeting we got to witness some sort of group connection and unity happening. All of the mothers gathered outside of the building to have a conversation and discuss about when they could meet outside of these intervention meetings. Obviously they had a lot to share and wanted to continue their discussions outside of intervention. This was very interesting and rewarding to see as a researcher and as the group leader.

Fourth meeting

In the fourth meeting, in May the 10th 2011, we wanted the mothers to evaluate their Polar Active results, set new short term goal and also a long term goal and we also incorporated some outdoor walking into the meeting. Before this meeting, the mothers had sent in their Polar Active watches to Likes for analysis. After the beginning round we handed out each mother their Polar Active results from the time they had used it and a hand out that had some information about goal setting. The first exercise was the mothers to take a look at their Polar Active results and mark down their main and most important observations and thoughts. Before we continued with that, Esa gave a 15
minute introduction about the basics of goal setting. After the introduction it was time to
stretch out and let the mothers to go for a walk in the nearby forest area in Pyynikki.
Instructions for the walk were to walk for approximately 40 minutes and during the
walk have a discussion in pairs or small groups about how did the Polar Active watch
influence their physical activity in their everyday life, and also about how they
incorporate exercise in to their everyday lives. In addition, we instructed them to think
about goal setting and what is a realistic goal for them.

After the 40 minute walk, mothers gathered in and we wanted to get the reflection of the
small groups’ discussion. Each group got to briefly explain the main ideas of their
discussion. Mothers told how they really had enjoyed using the Polar Active watch for
three weeks and they thought that it was a really good feedback giver. Some even said
that it was a good motivator. When it came to discussing about goal setting, mothers
had some contradicting views. Someone said that they needed to set a goal that allows
them to exercise separately from the family. And some said that they have to start
thinking exercise goals that includes the child or the entire family, otherwise it becomes
very difficult to stay physically active: for some, exercise cannot be a separate activity
from the family. One mother mentioned that a goal has to be realistic and enjoyable.
There were different, individual experiences.
Before the ending round, mothers evaluated their previous goal and set a new short and
long term goals. Some got inspired from the Polar Active discussions and thought of
their goals so that the child/children were included. Some kept their previous goal since
it was not reached, but majority had reached their goal and felt very pleased about it. It
was quite unanimous that as a long term goal exercise and being physically active
wanted to be part of everyday life.

*Fifth and sixth meeting*

The intervention started well, and Esa and I were pleased with the group and their
discussions. Summer was coming quickly. We had learned a lot by this far and wanted
to make sure that the summer was going to be productive as well. We had agreed that in
July there were no meetings since majority in Finland spend their summer vacation
then. Our fifth meeting was held in 22nd of June 2011 and the sixth in August 9th 2011.
Before the July’s summer break we wanted to give Polar Actives for the mothers to use for July since they had enjoyed using them so much and found it to be motivating in being physically active. Since we did not have a meeting in July, at least the Polar Actives would keep them going and remind them of the group. While the mothers were having a walk outside they were supposed to discuss about their new goals for the summer and think about a metaphor about themselves. We wished for them to think about the inhibiting and supporting factors for exercise in their surroundings. After the 50 minute walk mothers got to draw and write a metaphor and introduce it to the entire group. In addition, the new goals were told out load too. In this last meeting before summer break, we wanted to include something different in the ending round. Everyone had a chance to give a positive message to someone in the group in addition to telling their final feelings before leaving the meeting. Everyone was leaving the meeting with a good feeling, one mother said that her thoughts really activate in these meetings, one mother invited another mother to go to the swimming hall and one mother expressed her happiness and excitement for the Polar Active watch.

After the July’s summer break, in August, we wanted to activate he mothers a bit differently. We arranged the sixth meeting so that another intervention group, similar to this group, in Tampere would join the meeting. We had arranged some fun activities and a possibility to enjoy a lake sauna in Varala Sport Institute. We had three different activities arranged: Nordic walking, giant’s ladder and rock descending. After the activities, everyone could go the lake sauna where we had light dinner prepared ready for them and a sauna. Idea of this meeting was to have relaxing and fun time and introduce the two groups together. Everyone seemed to enjoy themselves and the company around them. It was mentioned several times how nice it was come to the ready set dinner table and enjoy time with adult company. We did not see as much mingling between the groups, it seemed that everyone talked to the people that they already knew, but we did not want to force that either. The mothers enjoyed the sauna and also used the opportunity to jump in the lake to cool off. That was such a nice evening, and a good beginning for the second half of the intervention.
Seventh and eight meeting

In September and October we had our seventh and eight meetings of the intervention. We had thought earlier in the summer about arranging a family activity day, where the mothers of this group, as well as the other group, and all of their families could come to Varala Sport Institute one day in the fall and enjoy some fun activities as families. Therefore, one of our goals in the seventh meeting was to gather ideas for this family activity day. As usual, previous goals were evaluated and new ones were set. Goal setting had already become a tradition in these meetings and we started to see changes in their learning process. Mothers did not have that much trouble setting goals anymore, since they were able to realize that they had to be realistic and physical activity had to be included somehow into their everyday activities with the child/children. It was at during these times when I was able to see and hear some changes in these mothers’ behaviours. Mothers talked how they have started to think about their choices, for example one of the mothers said that she keeps thinking on a daily basis whether to walk to the store or take the car, and most likely she will choose to walk with the strollers. Everything that the mothers said gave me belief in their change. Seventh meeting’s ending round ended up being a discussion about the change in the way of thinking. One mother started saying that because of the meetings she keeps thinking her choices in everyday life differently now. Another said that the barrier to exercise, or arrange life so that she was more physically active, had lowered. Sense of unity and belonging to an important group was sensed in this meeting when the mothers had a conversation about the last meeting where they got to meet the other Tampere mother group. Mothers discussed how they felt that our group members had a better connection with it each other. They said how it felt like the other group was still getting to know each other and our group members had more deeper conversations with each other than, for example, getting to know how many children each of them had. Interestingly, Esa informed me that this other group had a similar type of conversation in their meeting, where they felt that they had a better connection as a group when comparing to our group.

Eight meeting was done with the familiar plan: we started with the beginning round, we incorporated outdoor walking and the mothers set new goals for themselves. In addition, we did a new exercise called “travel map”. The goal of this exercise was for mothers to
think about their process in this intervention, where did they start, where they were now
and what does the future hold. Each mother had a large paper and colouring pens.
Starting point was in the lower left corner and ending point or the “future” point was in
the upper right corner. Mothers had 15 minutes time to illustrate their travel map: the
beginning, now and the future in this intervention process. The instructions were to
illustrate and write down thoughts, feelings and behaviour. After the 15 minutes of
individual work, the mothers paired up and got tell their pair about their travel map.
Just like in any other meeting we incorporated a small assignment to the walk in the
outdoors. We instructed the mothers to think about their travel maps and think about a
point or moment in that that they feel is the most important. Once they returned from
the walk, it was time to reflect on their thoughts. Everyone got to tell the entire group
about their most important point in the travel map. On interesting point was raised when
discussing about the travel maps: one of the mothers said that she has started to think
about more of the time management and what it really is, which could imply some signs
of empowerment. She referred the time management to “a constant puzzle”, where she
has to find the correct pieces to make her days and life work.

Before the ending round each mother evaluated their previous goals and set new ones.
At this point it was interesting to hear that the goals were more realistic than in the
beginning of the intervention, and this showed that the mothers had started to learn how
to set goals on their own terms. One mother, who is a single mother, for example said
that her short term goal now is to sort out a system where she can find a sitter for her
child while she goes to the gym. Earlier in the intervention her short term goals were
quite ambitious: go to the gym twice a week. Once she noticed that is was not going to
work, she had re-evaluate her goals and think differently what needed to be done in
order for her to be more physically active.

The eight meeting was ended with pleasant feelings. One of the mothers told how she
thinks that the assignments in the meetings help her clear her head. Writing down
thoughts gave clarity and made her think things more seriously. Another mother said
that she has started to think more about what type of person she wants to be, which also
could imply some signs of empowerment. This showed how everything that we had
done so far had had an effect on these mothers’ way of thinking.
Ninth meeting: joined meeting with the other group

Since not everyone was able to come to the previous meeting, we wanted to arrange a meeting in early November 2011, where the two groups of mothers go to meet again and have the ones who had not yet done the travel map to do it. This meeting was held exceptionally at the UKK Institute. The ones who had done the travel map could start off with some outdoor walking while the others worked on their maps. Some of the most important points that came up from the maps were setting goals and the change in the level of thinking. One of the mothers said that setting goals on a regular basis had helped her to leap over the barrier to exercise and manage her schedule more efficiently. This meeting was more relaxed in the sense of discussion. We only wanted to give the opportunity for the ones who had not done the travel map, to do it and we wanted to inform about the upcoming family activity day in Varala Sport Institute. Mothers were excited about it and had some questions about how the day was going to work.

We had arranged an opportunity for the mothers to use the sauna by the lake after the meeting, and couple of the mothers took the opportunity. This meeting gave the mothers an opportunity to meet the other group once again, get some information about the family activity day and have time to do some outdoor exercising, as well as work on the travel map.

Tenth meeting: family activity day in Varala Sport Institute

We had planned and arranged a family activity day in Varala Sport Institute on November 19\textsuperscript{th} 2011. The idea of this day was to have the mothers to come to Varala with their families and try some activities that they could do together as a family. There were four different activity spots: a fun trick trail indoors, a child-parent group exercise class, fitness boxing and outdoor activities with Frisbee golf and mölkky (a Finnish outdoor game). Fitness boxing gave the parents an opportunity to exercise individually if they wanted. However, it was planned so that if the older children in the families wanted to take part they could.

The day was planned so that everyone could come and go as they wanted between 10 am to 12 pm. Everyone could go and try all the activities if they wanted. Families had
the opportunity to have lunch at the restaurant after the activities, which many of the families utilized. The day was planned and arranged in co-operation with Varala Sport Institute and their two graduating students, who were responsible in arranging and instructing the activities. The students received their practicum work credits from it. Overall, everyone was pleased with the day and enjoyed some family time and activities together. We collected feedback from the families, which allowed us to evaluate the day and think new and better arrangements for the future.

Eleventh meeting

After the family activity day in November it was time to get ready for the year’s final meeting. On December 14\textsuperscript{th} 2011 we had our eleventh meeting. After this meeting only two meetings were left of the entire intervention. Earlier in the seventh meeting we had arranged individual meeting times for interviews where we wanted to gather information about their connection to physical activity and their point of view of the process in this action research. By this time I had interviewed everyone and had gathered some emerged themes from them for the mothers to decide on which themes were crucial and which themes they wanted to discuss about in this and future meetings. This was our main goal of the meeting. Liisa Lautamatti came to the meeting as well as a surprise guest and she guided an exercise where the mothers could write themselves a Christmas diploma, which was done at the end of the meeting. Since this meeting was in December and close to Christmas, we served some Glögi and snacks for everyone. Each mother got to take a look at the emerged themes on a hand-out and at first everyone worked individually. Everyone was instructed to choose one or two themes that they would like to discuss with a pair or a small group. With a pair or small group they were to discuss about the themes they chose and write down the main points of the discussion. The last part of this exercise was to reflect on what was discussed in pairs or small groups to the entire group. Discussions focused on themes such as family exercise, everyday exercise and rest. Additionally to this exercise we wanted the mothers to choose some additional themes that they wanted to discuss in the next meeting. This exercise was called the “five euro choices”. Everyone had imaginary five euros to use on choosing the themes. Five euros could be distributed on themes that they wanted to be discussed, for example one person could use three euros on one theme and one euro on another and one more to a third theme. Mothers could decide on the
distribution of the euros however they wanted. The main themes seemed to be the same ones that were chosen in the earlier exercise: family exercise, everyday exercise and rest. In addition some other themes were chosen too, for example inner motivation, values and time management.

The Christmas diploma was a fun exercise where the mothers got to write their own diploma on this past year. They could decide on how it was going to look like and what aspects they would grade. Once everyone had written their diploma, everyone got to hand out a diploma to their peers. This exercise was a nice way to hear about what the mothers thought on where they had succeeded in and where they needed to focus more on. One of the mothers gave her a school grade of 9 on being a good mother, and another gave herself a smiley face to represent her attempts to become more physically active. One of the mothers expressed how she had to give her memory a school grade of 6, because she felt that she kept forgetting things in her everyday life.

In the ending round everyone said that they were starting to feel a bit sad, because they knew that there were only two more meetings left. One mother was wondering what was going to happen to this regular “peer support group”. One mother said that she feels sad but very thankful. Another mother expressed how she enjoys the meetings because she gets to think about herself and her own life.

Twelfth meeting

The New Year was started with the twelfth meeting on the 11th of January 2012. The goals of this meeting were to work on assessing own situation, go deeper on themes such as time management, self and change process. Working on assessing own situation would work as good bridge to set new goals. In this meeting we also wanted to inform about a new upcoming project that is similar to this action research. In addition to this information, we informed and gave instructions about the post intervention measurements, which were going to happen during February 2012.

In assessing own situation and deepening the chosen themes, we used an exercise where the mothers would think about their situation through a metaphor. Instructions were to either choose one or both, and continue writing the sentence: 1) Mother’s time is like…
2) Before I was like…Now I am like… One mother referred her time as “river’s flow”, “You never know what is going to come behind the curve”, she explained. The other mother referred her time as “chewing gum”, “It stretches and pops”. None of the mothers chose to continue writing the second option sentence.

Only three mothers came to this meeting, so we ended up having a shorter meeting. We also left the outdoor walking from the schedule due to inclement weather. Nevertheless, this meeting was meaningful and I think that the metaphors explained a lot about the current situations of mothers who have small children.

After setting new short and long term goals, we finished the meeting with the ending round. One of the mothers said how she has learned to accept her situation, and that she does not have to be a “super exerciser” and the fact is that time management is a challenge at this life phase when they have small children.

*Thirteenth, the final meeting*

February was time to get the post measurements done, which meant that our thirteenth and final meeting was held in early March (March 7th 2012). The entire meeting was dedicated to evaluating the past year in the intervention and the process that these mothers had in it.

Like every other meeting, we started with the beginning round. I had taped all of the work that the mothers had written and drawn over the year on the walls of the room in a timeline manner. Colourful and everyone’s personal works from illustrations of the group relationships to the travel map were there to remind the mothers of their process in this intervention. Everyone was delighted to see them. After the beginning round, we started to take a look at the post measurement results. Each mother got to look at their results from the accelerometer data and mark down their observations. We had also handed out their pre intervention measurement result for them to compare their current results to. Work was divided in to familiar method of individual work, then in pairs or in small groups and finally reflection as a whole group. Many of these mothers had just returned back to work and they said that it shows on the results. Many of them said that during the days there were a lot of sitting down since they were at work. However,
some of the mothers were pleased to see that their overall step count had increased since the pre measurements. Mothers noticed that skiing, shovelling the snow and some of the group exercises did not show on the results as peaks of physical activity. Green and Novoradovskaya (2012) found in their study that there were no significant changes in between the pre and post measurements of the accelerometer data.

Before we continued with feedback of the intervention, we wanted to utilize the taped work on the walls. We allowed the mothers to have an open conversation and reminisce the past year. This was kept short since we wanted to have more time on the feedback and have a proper ending to the meeting. Mothers agreed that it was interesting to see now all the work that they had done in the beginning of the intervention. Some were thinking how their lives have changed over the year: children have grown, two of the mothers are expecting and some are back to work. Life changes and the everyday life have to be adjusted according to those changes. One of the mothers said how she thought that all of the written and illustrated work that they did helped her to structure her thoughts and as a result construct her goals and daily schedules.

The main work in this final meeting was to get feedback from the mothers. It was important for Esa and me to know what the most working aspects of the intervention were, and what kind of suggestions the mothers would give for the future interventions like this. Mothers paired for listing their thoughts down. Feedback was given as a whole group. Some of the things that the mothers thought as workable in the intervention were the monthly meetings, the group staying the same the entire intervention, measurements, goal setting and saying them out loud in front of the group, outdoor walks, assignments and exercises done in the meetings, location of the meetings and that he mothers were from the same areas. Suggestions for the future interventions like this were grouping the mothers with more specific background information (for example mothers of one child, mothers of more than two children, single mothers etc.), have more discussion, give more practical tips for exercising with a child or family and using the Polar Active watches more as a motivator to be physically active.

Before we moved on to the ending round, we wanted to do a small exercise where the mothers gave imaginary roses to their peers in the group. Everyone had a free word to say who to give the rose and what is it for. This exercise was a nice way to compliment
others for their work during the year and give positive feedback to whoever they wanted to. The ending round was done with questions “What will I take away from this experience? What do I carry in my mind? And what was valuable and good?” Each had an opportunity to answer, and exceptionally from the previous meetings Esa and I shared our thoughts too in this ending round. Main point form everyone’s saying was that it is a fact that a daily life of a new-born mother is challenging and they have learned to accept it. This intervention had given them an opportunity to think about ways for them to become more physically active as an individual and as a family. One mother said that she had learned to be merciful to herself. Many of the mothers agreed that this experience gave them new relationships that they will hold on to in the future. Esa and I thanked everyone for taking part to this meaningful intervention and action research. Personally I felt that I had learned tremendously about research in general, action research, leading an intervention group and be flexible and adjust to different situations that this process has brought up. The final meeting was finished with good feeling and gratitude.

4.2 Interviews

In the beginning of the second half of the intervention, in October 2011, we conducted interviews with all of the mothers. Purpose of these interviews was to get to know the connection that the mothers had with physical activity and what are the effecting factors. The interviews were scheduled around the time of the seventh and eight meeting, which was the time we started to see some changes in mother’s behaviour and way of thinking. At this time, the mothers felt that the group sessions had made an impact on them. Results of the five main themes (example to the child, exercising with significant others, peer support, use of time, everyday exercise) follow.

4.2.1 Example to the child

Four out of eight participants discussed about wanting to be an example to their child or children in having healthy lifestyle and exercising. This was also seen as a major motivator to become more physically active again. Participant 2 said:
“The fact that this stems, like, from myself and from what kind of example I want to give for example to my child...so, it has been considerably better motivator”.

This was also mentioned earlier and later in the group discussions by few of participants that the motivation had to come intrinsically for them rather than extrinsically. And showing a healthy example to their children by being more physically active was perceived as a strong intrinsic motivator. Participant 6 was also thinking about setting an example to her children:

“...and this is what we talked about last time, like, what do you want for your children, like I hope that girls would, like, get going with exercise...so it’s kind of hard if I don’t myself show the example...so then where will the kids get it then...”

Discussions about showing an example to the children often led to reflections about what type of example the participants had had from their own parents when they were children. Some mentioned how they had always had active parents who gave them opportunities to exercise and it was part of everyday life, but some gave descriptions of their parents being “lazy” and never really gave that example to them on how to live an active life. As a result, these participants wanted to set an opposite example to their children. One of the participants discussed how she wanted as a parent to show example on a value level:

”...so that children will see it that this is how it is done, according to our values, that if the travel is not long we don’t go by car”

Many of the participants discussed how making small choices during the day would make a difference, such as walking or riding a bicycle instead of taking a bus or car. Words “green values” was also stated as in wanting to be a bit more “greener” in choosing to walk to store with strollers instead of hopping in to the car.

This theme, wanting to give an example to the child, arose many times in the group discussions. The mothers felt that the parents are the ones that have to give the example to their children, and that it was only for their best. One of the participants also wanted
to make it clear that is not only up to the mother who has to give example, father or the spouse should have that responsibility too. They described the family as a unit that works together in creating healthier lifestyles for them and their children.

4.2.2 Exercising with significant others

In almost all of the interviews (six out of eight) the participants mentioned how they have started to think about options like exercising with someone, or they have started to do that all ready and found it to be working well for them. However, one of the participants mentioned that exercising or working out with a friend has never been a workable method for her to become more motivated to get moving.

During the intervention some of the participants started to exercise together. Participant 1 and 2 started to have regular walks together with their strollers. In addition, participant 3 got participants 1 and 2 to go to a group exercise classes with her. Participant 1 said:

“...for example those stroller walks, that we have done with participant 2 once a week... so that has been a thing that we make sure that we schedule it and it will happen”

She goes on and explains that:

“...we have gotten exercise (group exercise) company from each other. I think neither of us would have gone by ourselves”.

She finishes by saying that:

“...it’s something that you sort of realize that when you have that friend to go with, so it really has an effect on being active”.

Participant 2 confirmed the importance of the walks with participant 1 by saying:
“So, ummm... going for walks with participant 1...I mean, I won’t go alone for an hour stroller walks....so, ummm, that has certainly been the one most important factor that has changed this, ummm, system”.

Participant 3 gives a good description of the why she thinks exercising with a friend is valuable:

“Having company for walks... it includes strongly this social dimension. I go for walks with a friend of mine once a week. She is a mother like in a similar life situation, she has a daughter who is the same age as our daughter, and the girls play together in either one of our houses, in the meanwhile we have our walk...and this has become kind of like the entire family's thing, so that we all go there, my husband goes there as well, and he and my friend’s husband get along well, they always have a lot of things to hash out, and they watch the kids together, and then we do our walk. So that has, like, become a good block to our weekly schedule...”

Participant 4 explained how it is valued in their family to exercise and do activities together:

“Yes, we are really trying to exercise as a family, and even more now when our child is growing. So what we do is, we go to a baby swim class, and in general we like to go swimming as a family”.

Participant 5 had realized that she had changed her method during this intervention. She mentioned how before she had always liked to go for jogs alone, but now she has started to realize that jogging with a friend motivates her a lot. She said it motivates her a lot, because she knows that for both of them it is hard to find that time to go and exercise (both are busy stay-at-home mothers), and once it is put in a schedule it gives one a certain type of pressure and you do not want to let a friend down. She also said:

“...and over all, it's nice that the other one is hustling up for you when you are about to quit”.
This was also discussed many times in the group meetings, and almost everyone agreed that when you schedule to go exercise with someone you are more likely to go than if you were to go by yourself. However, participant 8 has found that exercising with a friend does not work for her:

“I would really like to be engaged in a hobby with someone, but over many years I have come to a conclusion that it won’t work, because if the other one won’t come and then I won’t go myself…”

On contrary, same participant has told that she and her husband sometimes arrange a babysitter so that they can go to the gym together.

Exercising as a group was incorporated in the intervention as well. In most of the group meetings the group walked outdoors at the same time when they were told to reflect on an assignment that was done earlier inside. This was thought to be a good method and I felt that it gave the participants an opportunity to socialize on a different level as well. One of the participants said in the last group meetings about the incorporated walks that “during those walks we talked about the topic we were given, but there were times too when we off-tracked in our conversations a little bit, but that was nice too”. This was an opportunity for them to share their experiences about their everyday life as mothers.

4.2.3 Peer support

As it was noted, the incorporated walks gave the mothers a chance to share their experiences. Majority of participants told that peer support was one of the positive things that the intervention group meetings had given to them. Being able to share experiences and hear about other mothers’ lives gave them sense of security that they were not alone in their type of situation. These mothers’ everyday lives were hectic and it was also mentioned that sometimes the life of a stay-at-home mother can feel lonely. These mothers spent most of their time alone with the child/children while the spouse was at work. Even though finding time to come to the group meetings once a month for two hours proved to be challenging for these mothers, peer support was mentioned as one of the major factors why they kept coming to the meetings. Knowing that someone else has a similar hectic life and trying to find ways to become more physically active
and share it with peers was sensed as a relief and gave the mothers new perspectives. Participant 4 said:

“...and then of course that some sort of peer support. The sharing of experiences, and getting tips from others like ‘this was difficult for me’ or sometimes it helps to just get a tip and that starts to make you think that thing, like, a little bit differently, like from a different perspective”.

Most of the participants felt that they were in similar situations and phases of life, but one participant (participant 5) felt that although she was a mother of small children she felt that she was in fact in a different situation because she had three small children and the majority of participants were new mothers of a one child. She said:

“...so you come to notice that the time arrangement or trying to keep up with the schedule, like, becomes harder after every child you get...so I feel like I’m in a different life situation than many of the others in the group although we all have children...It’s considerably a different thing. I recognize myself from the others when I had my first child...same features from them...but I notice that a lot of those have shaken off (laughter)”

Participant 5 felt that she was sharing similar kind of experiences with participant 6, because she also had three small children. Still the group meetings gave a secure environment for the mothers to come and talk about their lives and think about the best ways to incorporate more exercise in their hectic lives. They did not have to think about that alone but with other mothers who know how difficult it can be to try to juggle many things in life. Participants 5 and 6 had three children and the mothers who had only one child had mentioned how that also gave them motivation to do better at finding time to be more active, because they thought that if a mother of three is doing it they should be able to do it too. In addition, one of the mothers was a single parent, which separated her a bit from the group too, but it was mentioned in the group meetings many times how the others respected her ability to juggle the everyday hassles and she still managed to stay physically active. Participant 3 even said that participant 7’s situation really motivated her to be more physically active, and she also thought that seeing others juggling the same issues gave her a push to try harder. She said:
“The thought that someone is doing this by herself and still manages to arrange time for exercise really kicks me…it really motivates like…and then of course all the others too, when you hear that it is just as hard for them too, so that this, my situation, is not somehow especially difficult….so, you just have to really try to persevere and try to get everything to work, so I think in that sense the peer support has been good”.

Some felt that the peer support gave them comfort and relief when they noticed that others were in the same type of situation and for others that gave them a push to try harder to find time to exercise more. All in all the peer support was seen as a positive asset.

The group of mothers came really close to one another during the yearlong intervention. I remember that the group cohesion started to happen very early on and already after the couple first meetings I could see the mothers gathered outside after the meeting, talking and arranging a get-together outside of the intervention. There were many times before and after the group meetings when the mothers were talking about their get-togethers or were planning a new one. The group really seemed to enjoy each other’s company, which was really nice to see from a group leader’s point of view. Somehow we had managed to create a safe and trustworthy environment for them to interact and get to know each other.

4.2.4 Use of time

Use of time and scheduling time seemed to be one of the most central themes when the participants talked about their relationship to physical activity. The daily time is filled with child care and household chores, not much time is left for exercise or if a little time is found, it is utilized to rest and recover from a long day with a child or children. Many times in the meetings these mothers said that the use of time is such a managing job. They had their hands full with their child or children and keeping the household together, and at the later stage of the intervention many of these mothers returned back to work, which gave even more work when trying to find time to exercise. Participant 1 was thinking about the things that she needs to think beforehand when starting to plan to go to an exercise class and after a long explanation she finished saying that:
“...But it’s not only about me anymore, that I could just take off (to an exercise class) and go, but now there’s, like, multiple factors, so it’s more challenging”.

The challenge seemed to be finding time to go and exercise separately from the family, for example going to a run alone or take part in an exercise class. If one wanted to exercise without the children it had to planned, that is what participant 3 mentioned.

“...in this phase of life, it definitely has to be on a weekly planning level, if you want to, like, do something, so... not only the good will is enough, but you just have to go to that level....that every Sunday evening when we sit down and go over our next week, I just have to make a plan and fit it in the schedule....”

Everything in their everyday life needed to be planned and time is managed very effectively. Participant 4 was thinking about the factors that affect her being physically active:

“The use of time...everything from the child’s schedule, sleeping, feeding and arranging childcare, and of course my husband’s schedule... and you know, if the child is sick, I wouldn’t go to the exercise class, I wouldn’t do that.”

It became really clear that managing time was a challenge to all of the mothers in the group, but participant 5 explained how difficult it can be with five people in the family:

“(laughter) well, let just say that the use of time is really a challenge, because there are five people in the family, and one of them has just started school and because of school a lot of new hobbies have started for her. And then both of us parents are really active with the girl and boy scouts so there’s always some sort of project going on for us...”

Mothers also discussed how they always have to struggle with choosing, there are so many things going on during the day that they might have to choose between going for a jog or having a social meeting with their friends. Participant 6 was also struggling with deciding on what to do after work:
“Well, it’s a challenge. Well, right now it’s better because my husband has a father month off from work, so I know that he can always be home…but then again, how much I can be away from home and the kids? Like, for example, on Mondays when I have that Chi Gong, firstly I am at work until 3:30 pm and then I have an hour before it (Chi Gong class) starts, it takes an hour and a half, it ends at 6 pm, and then there’s only an hour before the kids’ evening snack, so I have come to think of it that what is the point in this…”

The mothers have so little of their own time that it is hard for them to decide on how to use it. It seemed like a lot of these mothers were struggling to decide on whether to stay home with the kids or go to an exercise class. Participant 8 explained how the whole theme, use of time, seemed so miserable to her, because “we just can’t get any extra hours from anywhere”.

4.2.5 Everyday exercise

As mentioned earlier, it seemed that the mothers struggled to find time to exercise separately from the family and I understood that this is what the mothers considered more as exercise. They felt that going to the gym or going for a jog without the children was more of a work out or exercise rather than doing activities with the children or the family. But when they started to think about their relationship to physical activity they kept mentioning everyday exercise and activities that they do during the day without any intentional planning. Participant 8 explains what every day exercise is for her:

“Walking with the strollers and taking the dog for a walk, but I have always thought that exercise has to be something where you get the blood taste in your mouth and the shirt is really sweaty (laughter)...so I can’t like perceive that as exercise then, but I guess that’s what it is everyday quite a lot though”

Participant 1 explains:

“We go up and down the stairs a lot because she (the child) is practicing a lot now...and we probably do more household chores, renovations and such than normally because we have this house project here and we have a big yard...so it’s not like
Participant 2 told how having a dog has kept them at least somewhat active because they have to take it out daily. She also mentioned that taking walks with the strollers have become one of the main activities that she does now. Walking to the store or to the library with the children was mentioned by other mothers too. Participant 2 said it very well:

“All the everyday exercise that we can do now, is fully reliant on what we can actually do with the child. It depends on that…”

Participant 3 explained how the everyday exercise can be a struggle as well:

“…sometimes it just feels so basic and sometimes I really have to push myself to do it. Like if it’s raining outside and I have to take the kids to the day-care, I really don’t feel like walking especially when the car is sitting right out there, but we still do it, we put on those rain clothes and walk to the day care, but sometimes it is just such a struggle to keep up with it…”

The intervention gave the participants an opportunity think ways to be more active in their everyday lives since it was clear that the children are a big part of their lives now, and it is very rare when the mothers get a chance to exercise alone or separately from the family. Participant 3 mentioned how the everyday exercise defines her physical activity and what it means to her:

“Well it probably is the everyday exercise…right now it is sort of a supporting force and I see it like very enjoyable and it brings me satisfaction, because I think that I have now harnessed it in to use”

Participant 6 mentioned that exercising outdoors with the children is not that effective for her:
“…when you think about to do some everyday exercise with your kids, it’s like... I noticed that when we were taking a walk with the kids the other day, it was so slow that when I had the accelerometer on it didn’t really show any peaks on my activity level. So with the kids, it’s then more of a mental exercise”

Everyday exercise was something that the mothers did not really perceive as “real” exercise, but it was something that occurs a lot in their lives. Finding solutions to exercise with the children or as a family is more realistic for these mothers than exercising alone since this phase of life forces them to be with their children all day most of the time.
5. DISCUSSION AND CONCLUSIONS

The purpose of this study was to understand the life situation of mothers of new-born, understand their connection to physical activity and the factors that influence it, and develop suitable ideas for a method to provide mothers an intervention or a program to promote physical activity. The aim was to study the implementation of the intervention and possible barriers and phases of learning and change among the participant mothers. In addition the aim was to describe the experiences of the mothers about the programme.

Major finding about the implementation of the programme was that everything went well overall. The mothers experienced that the methods, that were used, were useful and allowed them to think about their physical-activity on their own terms, which gave them a sense of empowerment in their individual change. Goal-setting in particular was perceived as a useful method. The mothers learned to set realistic short-term goals, which helped them to envision and set long-term goals as well.

The major findings from the researcher’s diary and interviews were that the life of a mother of new-born is hectic and their time is limited due to childcare and household activities, and therefore the major factor influencing their physical activity is lack of time. It was also noted in the intervention that the mothers started to form strong group cohesion and communality, and they perceived their group to be important to them. Due to the intervention, the mothers started to have changes in the way of thinking when it came to physical activity and time-management.

5.1 Self-determination theory and the method of the intervention

The supporting theory for the method of this intervention came from Deci and Ryan’s (1985) self-determination theory (SDT). SDT highlights three basic needs for motivated behaviour: competence, autonomy, and relatedness. In this study it was clear from the beginning that the mothers had the competence for changing their behaviour, because in the beginning of the intervention they expressed that they want to find new motivation to physical activity. Furthermore competence was illustrated in the goal setting process,
when the mothers started to notice that their goals had moulded into achievable ones. Autonomy in this intervention was incorporated by allowing the mothers to think about their everyday lives and find new ways to become more physically active through different themed assignments. Each mother got to set their own goals. We never gave answers on what and how they should behave, but we allowed them to find those answers by themselves, since they are the experts of their lives. The factors of relatedness came from the group itself. Mothers were able to relate their lives to one another’s because they were sharing a similar phase of life. As Deci and Ryan (2000) pointed out, settings supporting the individual’s experience of autonomy, competence and relatedness are argued to nurture the most volitional and high quality forms of motivation and engagement for activities, including enhanced performance, persistence, and creativity. In this study the setting was ideal according to SDT and the needs for autonomy, competence and relatedness.

5.2 The lives of mothers of new-borns

A yearlong intervention for a group of mothers of new-born gave us researchers a vast database about what it is to be a mother of a new-born and what are the factors affecting their physical activity levels. Already from the data used for this master’s thesis it was clearly noted, and that being one of the major findings, that mothers who have at least one child under the age of one, live their lives devoting their time to childcare and taking care of the family and home. Data revealed that the mothers struggled to find time to exercise, which supports previously done research on barriers to physical activity (Biddle & Mutrie, 2008; Sørensen & Gill, 2008; Zlot et al., 2006). Use of time and time-management was perceived as a struggle and “a constant puzzle”. There just really is not enough time for leisurely activities such as exercise, reading and art hobbies (Pääkkönen, 2010), and the mothers in my study prioritized family before exercise just like Sørensen and Gill (2008) concluded in their study that women perceive more priority barriers, such as house and family activities, to physical activity.
5.3 Change in the way of thinking

All of the mothers came to the intervention wanting to find new motivation to be physically active, and whether this was achieved, it is hard to say, but also one of the biggest findings of this study was that the mothers started to change their way of thinking when it came to physical activity. This finding was clearly noted in both, the researcher’s diary and interviews. The intervention highlighted the fact that their time really is limited and they had to start thinking another ways to be physically active rather than going to the gym on their own, for example. Another way to say it is that the intervention nurtured their creativity. The mothers are closely entwined to their family, especially their child or children, which made them think of ways to include them to their physical activity goals. This finding goes hand in hand with the findings and conclusions of Jones et al. (2010): the best way to increase physical activity of this type of groups would be to use an approach that includes the whole family or at least the mother and child.

Even though the intervention was profound, well planned and had good methods, no changes in the physical activity mean measures were noted. Green and Novoradovskaya (2012) measured physical activity levels of the mothers of the current study. They found that the mothers’ physical activity levels did not increase when they compared the pre- and post-intervention measurements in accelerometer and activity log data. Physical activity levels did not decrease either (Green, & Novoradovskaya, 2012). Even though, they were unable to detect any physical changes, I was able to see changes in the individual level in the mothers’ way of thinking and how they wanted to approach their physical activity levels. Providing the autonomy for them to find a best possible solution that works for their life situation got them to think how they perceive their situation and physical activity. This is a promising start in changing behavior, and the hope is that the mothers start to adapt more physical activity in to their daily lives. We can conclude that the mothers were clearly motivated to exercise due to the positive impact of the group sessions. However, there were major barriers to activities like lack of time.

Accelerometer data provides an objective view on the levels of physical activity, and it is important to explain some factors that might have influenced the results of the current study. First and foremost, the accelerometer model used in this study measures vertical
acceleration and selects data along the human movement frequencies. It was noted that the accelerometer does not measure every type of physical activity that the mothers did. We allowed the mothers to take a look at their own results and reflect on what they had done on each measurement day. We also asked them to write down activities that they had done, but what they could not see in the accelerometer results. Some of the activities that were not measured, according to the mothers, included cross country skiing, shovelling snow, some group exercise class with conditioning exercises and swimming (the accelerometer is not waterproof). Additionally, during the post measurements some of the mothers had already returned back to work, which meant that they did a lot of sitting down during the day, which is probably one of the reasons why the post-measurements were not higher than the pre-measurements. During the pre-measurements all of the mothers were home with their child/children, which reflect a different type of life situation when comparing to some of the mothers’ life situation during the post-measurements when some of them had returned back to work.

5.4 Social and peer support

One of the other major findings of this study was that the group of mothers started to form a visible group cohesion and unity from early on. Mothers started to arrange meetings as a group outside of the intervention and they perceived that their group had a deeper connection with each other after meeting the other similar group’s members. Additionally, each ending round was finished with a good feeling and reflection, which gave me an understanding that the mothers enjoyed their time in the meetings. The mothers gave each other social- and peer support. Biddle and Mutrie (2008) noted that there are three types of social support that can influence one’s behaviour: emotional, informational, and material. One of the mother’s quotations about peer support illustrates well the emotional aspect:

“The thought that someone is doing this by herself and still manages to arrange time for exercise really kicks me…it really motivates like…and then of course all the others too, when you hear that it is just as hard for them too, so that this, my situation, is not somehow especially difficult….so, you just have to really try to persevere and try to get everything to work, so I think in that sense the peer support has been good”.
Informational support the mothers got from other mothers in every meeting, when they shared their lives and what they have done and what they found to be effective. When it comes to the material support, it was harder to note, but the mothers who lived in the same areas started to share rides to the meetings, which can be thought as a material support. Additionally the data shows that the mothers who lived in the same area started to go to the same group exercise classes together. Burke et al. (2010) pointed out that group membership is associated with enhanced adherence and compliance behaviors. Therefore I can conclude that the support that the mothers got from the group and from the other mothers could be one of the reasons the mothers kept coming to the meetings and none of them dropped out of the intervention. The mothers shared their thoughts, ideas and experienced activities together which created communality (Rovio et al., 2009).

5.5 Phases of learning and change

As we can make a mark from previous paragraphs, we were able notice some changes in the mothers’ way of thinking and learning experience. As the intervention and the group sessions went on for a one year, we were able to gather much data, which showed us that the participants went through different phases. The researcher’s diary revealed that in the beginning the mothers were orienting to the group and the group sessions. Everything and everyone was still new for them and I think everyone was still trying to find their place in this setting. The beginning was like an orientation-phase not only to the participants, but also for me too. Both, the researcher’s diary and the interviews showed us that the mothers went through a learning-phase, where the mothers learned how to set goals and understood that they have to be realistic in order to reach them. This phase happened many times during the one year period. Some learning of goal setting could be seen already on the third meeting, when many of the mothers had to reassess their goals since they seemed to be too hard to reach. I also came in to conclusion that in the third meeting the mothers went through a group unity-phase, we were able to see some group connection and unity among the mothers when they started to gather after the meeting and make plans together outside of the group sessions. Towards the end of the intervention year, but already in the seventh and eight meetings, we were able to notice that the mothers started to have changes in their way of thinking.
They were reflecting on their goals and how they behaved in relation to physical activity. The last group sessions could be interpreted as a type of novel action and reflection –phase.

The intervention year could be divided into four different phases of learning and change which the mothers went through. They were the orientation-phase, the learning-phase, the group unity –phase and the novel action and reflection –phase. These phases were not as clearly set as it could be imagined within the intervention year, but at least it was quite obvious to see when each phase started. Some of the phases were repeated and overlapping at some point. But it is always good to remember that the phases are perceptions from the researcher’s point of view, not so clearly the participants’, even though the interviews did reveal some of the themes that relate to the phases such as example to the child, exercising with important others and peer support. Themes example to the child and exercising with important others can be associated with the learning –phase, and peer support theme can be linked to the group unity –phase.

5.6 Limitations and challenges of the study

Qualitative studies with limited participants always bring up the question: could the results of this study be transferred a larger population? The fact that this study had only eight participants is a limitation, because the results cannot be generalized. However, for a qualitative study eight participants is a sufficient amount, and this type of study would be difficult to do on a large scale and the results of this study give important implications for researchers to study more groups like this, because there is a need for that.

Another limitation of this study was that the intervention itself, including the interviews were conducted in Finnish and all of that information was translated to English for this paper. Translating the quotations of the mothers from Finnish to English can lose some of the original meaning and feeling of the message.

One of the challenges in this study was to narrow down the data for this thesis work. Typical to an action research, there was a large amount of data and it was difficult to choose what to use in the analysis. Once the proper data was chosen and analysed, narrowing down to what is actually in this paper was a challenge too, because there was
so much. However, this is a challenge that I think almost every researcher faces with qualitative data.

The challenges that I faced with the intervention itself came with the leading the group and managing the entire project. As a student researcher and a novice in action research I found myself assessing my own abilities to lead this group, especially in the beginning of the intervention. As the intervention continued I found more confident in myself and felt that leading the group became more natural to me. Managing all the produced data in the action research proved to be a bit of a challenge in the beginning too. I learned that everything is good to have dated and named, and all the work that the mothers produced on a paper should be photographed.

5.7 Implications for future interventions

Based on the data collected from this study and reading previous intervention studies, I would like to give recommendations for future interventions that target mothers of newborn.

It is important to make the grouping of the mothers as specific as possible. Even though the mothers, who were in this study, were all mothers of new-born, there were still few differences which might have created a sense of not being in the same situation. For example, two of the mothers had three children when majority only had one child, and one of the mothers was a single parent. In the future, I think it is important to form the groups so that the background information of the mothers is as similar among everyone as possible. Being a mother of three children is different when comparing to being a mother of one child, just like one of the mothers pointed out in the interview.

Furthermore, it is important that the groups are formed so that the members of the group live in the same or close to the same areas. This was found to be beneficial in this study. Mothers started to interact outside of the intervention meetings, which created communality (Rovio et al., 2009), and it supported the mother’s experience of relatedness (Deci & Ryan, 2000)

When planning an intervention to promote physical activity it is important to think about different theories and adapt those in the method of the intervention. Deci and Ryan’s (1985) SDT is a good theory to use because it stresses the need for autonomy. In
this study the autonomy was fully incorporated and it helped the mothers to be creative in their way of thinking new methods to be more physically active. As mentioned before, settings that support individual’s experience of autonomy, competence and relatedness nurture the volitional and high quality forms of motivation and engagement for activities (Deci & Ryan, 2000).

In addition to the findings of this study, prior research has shown that social relationships, social support, peer support and group processes play an important part in physical activity promotion (Amomir et al, 2010; Burke et al., 2010; Hale et al., 2005; Hardman at al., 2011; Hsu et al., 2011; Ulrich-French & Smith, 2006). Therefore it is important that these aspects are incorporated in the future interventions like this. The group itself can create relationships, and support, but I think it is also important to incorporate these themes into assignments where the participants have to think about their current social relationships and how they can affect their physical activity levels.

Considering the life situation of mothers of new-born it is important to think about the length of time between the meetings. In this study the group of mothers met approximately once a month and even that seemed to be a struggle for the mothers to find time to. However, I think that if we would have had the meetings for example once every two months, it would have affected the quality of the intervention and possibly the adherence of the mothers. If the meetings would have been closer to another, for example twice a month, it could have created problems with dropping out, because the mothers’ time was so limited. Meetings once a month was perceived to be good to follow. There were times when some of the mothers could not make it to the meeting, but this was either due to a sudden sickness, or not being able to find a babysitter for the children. Therefore, for the future interventions, I would suggest a hired babysitter who could go to the participants’ houses if they needed any babysitting help during those days when the intervention meeting was held. This could possibly help out with absences and drop-outs.

Intervening and promoting physical activity should be multi-levelled, and there are many aspects that one should consider when planning a physical activity intervention. Sallis et al’s. (2002) ecological model of health behaviour suggest that behaviour should be intervened on multiple levels, such as biological, psychological, social, cultural, organizational, community, physical environmental, and policy. Trying to apply all of
these levels can be difficult, time-consuming and expensive, but it is important to try to apply a range of these levels rather than just only one or two, because multi-level interventions are supposedly most effective in changing behaviour (Sallis et al., 2002). In this current study, we incorporated multiple levels, but in order to create the intervention even more effective I think it should be more convenient and attractive to mothers of new-born. Convenience and attractiveness could be enhanced with the already mentioned babysitter availability and possibly incorporate more actual physical activity in the intervention itself. Incorporating more actual physical activity in the intervention would of course mean that the participants would have the autonomy to choose the methods of physical activity.

5.8 Contribution to knowledge of the study

As a last paragraph I think it is important to reflect on what was the most central aspect of this current study, and what we can take from it. Firstly, this type of study, that studied and intervened a group of mothers of new-born, is important, because there really is no previous studies done that investigate lives of mothers of new-borns. We need more research and information in this area to set correct and effective programmes that promote physical activity for this kind of groups. As I learned from this current study, in order to see some changes in the ways of thinking, or maybe even get some behavioural changes to occur, it is essential to remember how hectic a life of a mother of new-born can be and, that they are closely tied to their child in most of the things that they do during their everyday lives. This aspect needs to be respected when planning any future interventions to promote physical activity for mothers of new-borns. The mothers are experts of their own lives and therefore it is crucial to allow and support autonomy in the entire process. Allowing the mothers to experience a sense of empowerment can make a difference and also makes the entire experience much more enjoyable for them. In the future the aim is to organize more groups. Then it is possible to have more cycles of action research, and see if the learning and changes are similar in new groups.
6. REFERENCES


APPENDICES

Appendix A

**Nimi:** Pinja Laitinen, Esa Rovio

**Kurssi/tapaaminen:** Liikuntakynnyksen yli, Vauvaikäisten perheenäidit (Pinjan ryhmä)

**Aika:** 8.3.2011, 2 h

**Tavoitteet:** ryhmäsuhteiden pohtiminen, omien tulosten tulkistaminen, tavoitteen asettaminen

<table>
<thead>
<tr>
<th>VAIHE</th>
<th>TAVOITE/AIHE</th>
<th>AKTIVITEETTI METODI</th>
<th>PERUSTELUT ODOTUKSET</th>
<th>HAVAINNOT JOHTOPÄÄTÖKS ET</th>
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</thead>
<tbody>
<tr>
<td>TYÖSKENTELELY</td>
<td>Havainnoida omia tuloksia, kirjata ylös tärkeimmät ja samankaltaiset havainnot.</td>
<td>Pyramidi 1. yksin, kirjaa omia havaintoja 2. parin kanssa, kirjaa samankaltaiset havainnot 3. 2 ryhmää, kirjaa selkeesti esiin nousevia samankaltaisia havaintoja (3-4 asiaa)</td>
<td>Huomiointi muiden tulosten samankaltaisuudesta.</td>
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4. jne...


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**Nimi:** Pinja Laitinen, Esa Rovio  
**Kurssi/tapaaminen:** Liikuntakynnyksen yli, Vauvaikäisten perheenäidit (Pinjan ryhmä)  
**Aika:** 12.4.2011, 2 h  
**Tavoitteet:** Ajankäytön tutkiminen, toimintatavan pohdinta, arvioidaan lyhyen aikavälin tavoite, Polar-kellojen käyttöönotto

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<tr>
<th>VAIHE</th>
<th>TAVOITE/AIHE</th>
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<td>METODI</td>
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</table>
**ALOITUS**  
Aika: n. 16:05-16:25  
(n. 20 min)  

| 1. Tarkoituks: mitä täänä tehdään?  
2. Aikataulu: seuraava tapaaminen  
|---|---|---|

**SIIRTYMÄ**  
Aika: yhdistettynä aloituksen kanssa.  

|---|---|---|

**TYÖSKENTELY**  
1. Ajankäyttö  
Aika: n. 16:25-16:50  
(n. 25 min)  

2. Pareittain: keskustele ja kirja paperille 3 olennaista asiaa joita huomaatte kaaviosta.  
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<td>- Pinja esittää retorisen kysymykse</td>
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<tr>
<td>Aika: n. 16:50-17:05 (n. 15 min)</td>
<td></td>
<td>2. Pareittain keskustelee ja kirjaa paperille.</td>
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<td>3. Parit esittelevät kirjaamansa asiat ja toiveet.</td>
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<td>4. Priorisointi (5 euron kolikkoa)</td>
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<td>Aika: n. 17:05-17:20 (n. 15 min)</td>
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<td>2. Uusi tavoite: koko ryhmän kanssa</td>
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<td></td>
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<td>Oletettavasti että kaikki eivät ole saavuttaneet tavoitettaan tai ainakin kokivat sen haasteellisesti.</td>
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<td>Aika: n. 17:20-17:40 (n. 20 min)</td>
<td></td>
<td>Ihmettelyä ja kysymyksiä kellon käytöstä. Mahdollisia kysymyksiä</td>
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</tbody>
</table>
motivoida ryhmäläisiä liikkumaan tai tarkkailla omaa liikkumistaan. toisen kellon jakamisesta omaiselle.

**PÄÄTÖS**
Aika: n. 17:40-17:50 (n. 8 min)
Lopputierros: Millä mielellä lähden?
Yksitellen suullisesti.

**Nimi:** Pinja Laitinen, Esa Rovio

**Kurssi/tapaaminen:** Liikuntakynnyksen Yli, Vauvaikäisten perheenäidit (Pinjan ryhmä)

**Aika:** 2 h, 10.5.2011

**Tavoitteet:** Polar Active tulosten tulkitseminen (oman aktiivisuuden arviointi), lyhyen ja pitkän aikavälin tavoitteiden asettamisen ymmärtäminen

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<th>VAIHE</th>
<th>TAVOITE/AIHE</th>
<th>AKTIVITEETTI METODI</th>
<th>PERUSTELUT ODOTUKSET</th>
<th>HAVAINNOSTO JOHTOPÄÄTÖK SET</th>
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</thead>
</table>
| **ALOITUS**
Aika: n. 16:05-16:20 (15 min) | 1. Tarkoitus: Mitä tänään tehdään?
| **SIIRTYMÄ**
Aika: osana aloitusta | Polar Active tulosten sekä tavoitteiden asettamis-diojen jakaminen. | Pinja tai Esa jakaa paperit ryhmäläisille. | | |
| **TYÖSKENTELY**
Aika: n. 16:20-16:25 (5 min) | 1. Yksin, tutki ja kirja mietteitä tuloksistasi. | Ryhmäläiset kirjaavat paperille keskeisiä (heille merkittäviä) havaintoja tuloksistaan. | | |
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<td>Aika: n. 16:25-16:40 (15 min)</td>
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<td>Aika: n. 16:40-17:20 (40 min)</td>
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<tr>
<td>4. Yhteenveto ja uuden tavoitteen asettamiseen</td>
<td>1. Kertokaa keskeisimät asiat joista keskustelitte kävelyn aikana.</td>
<td>1. Ryhmä kerrallaan kertoo suullisesti (2 min/ryhmä=8 min)</td>
</tr>
<tr>
<td>Aika: n. 17:20-17:40 (20 min)</td>
<td>2. Kerro saavutitko edellisellä kerralla asettamasi tavoitteen. Opitko siitä jotain? Kerro uusi tavoitteesi (pitkän aikavälin).</td>
<td>2. Yksitellen jokainen kertoo tavoitteistaan (1 min/hlö=8 min)</td>
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<td>PÄÄTÖS</td>
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<tr>
<td>Aika: n. 17:40-17:50 (n.8 min)</td>
<td>Loppukierros: Millä mielellä lähdet?</td>
<td>Yksitellen suullisesti.</td>
</tr>
</tbody>
</table>
**Nimi:** Pinja Laitinen, Esa Rovio  
**Kurssi/tapaaminen:** Liikuntakynnyksen Yli, Vauvaikäisten perheenäidit (Pinjan ryhmä)  
**Aika:** 2h. 22.6.2011  
**Tavoitteet:** Liikkuminen yhdessä, omien liikuntaa estävien ja edistävien asioiden pohtiminen, kesätavoitteiden asettaminen.

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<tr>
<th>VAIHE</th>
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<th>AKTIVITEETTI METODI</th>
<th>PERUSTELUT ODOTUKSET</th>
<th>HAVAINNOT JOHTOPÄÄTÖ KSET</th>
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<tbody>
<tr>
<td>SIIRTYMÄ</td>
<td>Polar-kellojen jakaminen, jokaiselle kaksi kelloa.</td>
<td>Pinja ja Esa jakavat Polarit.</td>
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<td>SIIRTYMÄ: Aika: 17:20-17:25 (5 min)</td>
<td>Jaetaan ohjeet, Esa kertoo lyhyesti.</td>
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<td>TYÖSKENTELY</td>
<td>Kerrotaan ohjeet kellon käytöstä kesän aikana.</td>
<td>Huom. ottakaa kellojen koodit paperille (itselle ja Hermannille).</td>
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<td>5.</td>
<td>Pohjakaava Polareista</td>
<td>Jaetaan ohjeet, Esa kertoo lyhyesti.</td>
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<td>Aika: 17:25-17:35 (10 min)</td>
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<td>6.</td>
<td>Kävelyä ja keskustelua</td>
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<td>Aika: 17:35-18:25 (50 min)</td>
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<td></td>
<td>2-3 henkilön ryhmissä kävelyä Varalan ja Pyynikin maastossa. Vertauskuva (metafora) itsestä, oman näköinen juttu (estävät ja edistävät tekijät minun ympäröistössäni) sekä keskustelaa ryhmässä uudesta kesätavoitteesta.</td>
<td>Ryhmäläiset kävelevät Varalan maastossa. JKL:ssä on toiminut hyvin, että ohjaajat eivät ole mukana. Voimme sanoa, että tarvittaessa (jos joku haluaa keskustella itselle tärkeästä asiasta)</td>
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</table>
7. Yhteenveto ja uuden tavoitteen asettaminen.
Aika: 18:25-18:45 (20 min)

| 1. Jokainen piirtää oman metaphoransa (liikunta edistävät ja estävät tekijät (A4:lle). |
| 2. Saavutitko edellisellä kerralla asettamasi tavoitteen? Mikä on kesän tavoitteesi? |

1. Jokainen esittelee vuorollaan metaphoransa (yhdessä ryhmässä, jos aikaa), tuliko oivalluk sia- yhteiske skustelu (jos aikaa) n. 12 min
2. Yksitellen jokainen kertoa tavoitteistaan (1 min/hlö = 8 min)

8.
### Nimi: Pinja Laitinen, Esa Rovio

**Kurssi/tapaaminen:** Liikuntakynnyksen yli, Vauvaikäisten perheenäidit (Pinjan ryhmä)

**Aika:** 8.9.2011, 2 h

**Tavoitteet:** Pohtia uudelleen tavoitteita, ideoida perhetapaamista

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<th>PERUSTELUT ODOTUKSET</th>
<th>HAVAINNOT JOHTOPÄÄTÖKSET</th>
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<tbody>
<tr>
<td><strong>ALOITUS</strong></td>
<td>n. klo 17:05-17:15</td>
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<tr>
<td>1. Tarkoitus: mitä tänään tehdään?</td>
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<tr>
<td>2. Aikataulu: seuraava tapaaminen 5.10.11</td>
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<td>3. Alkukierros: Mistä tilanteesta tulen?</td>
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<tr>
<td>Pinja kertoo tarkoituksen ja aikataulun. Ryhmäläiset kertovat lyhyesti mistä tilanteesta tulevat.</td>
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erikseen) vai niin että koko perhe voi osallistua kaikkeen toimintaan? Ideoikaa ja miettikää vaihtoehtoja.

2. Ulkoilua Pyynikin ja Varalan maastoissa, tavoitteen asettaminen n. klo 17:40-18:20

3. Tavoitteiden purku n. klo 18:20 -18:40
   Kirjoittakaa ja kertokaa tavoitteenne. Ryhmäläise t kertovat vuorotellen tavoitteista an. Pinja kirjaa ylös.

4. Haastatteluajankohdat n. klo 18:40-18:50
   Sovitaan haastattelujen ajankohdat. Enimmäiset kaksi voivat olla 5.10.11 ennen tapaamista.

   PÄÄTÖS
   Loppukierros n. klo 18:50-19:00
   Loppukierros: Millä mieellä lähden? Ryhmäläise t kertovat yksitellen. N. 1 min/hlö

**Nimi:** Pinja Laitinen, Esa Rovio  
**Kurssi/tapaaminen:** Liikuntakynnyksen yli, Vauvaikäisten perheenäidit (Pinjan ryhmä)  
**Aika:** ma 3.10.2011, 2 h  
**Tavoitteet:** ”matkakartan” hahmoittaminen, tavoitteiden asettaminen

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<tr>
<th>VAIHE</th>
<th>TAVOITE/AIHE</th>
<th>AKTIVITEETTI METODI</th>
<th>PERUST ELUT ODOTUK SET</th>
<th>HAVAINNOT JOHTOPÄÄT ÖKSET</th>
</tr>
</thead>
</table>
| ALOITUS n. klo 17:05-17.15 | 1. Tarkoitus: Mitä tänään tehdään?  
2. Aikataulu: ke 5.10. haastattel | Pinja kertoo tapaamisen tarkoitukseen ja aikataulun. Ryhmäläiset kertovat lyhyesti mistä | | |
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<tbody>
<tr>
<td>SIIRTYMÄ</td>
<td>n. klo 17:15-17:20</td>
<td>&quot;Matkakartta&quot;-tehtävän ohjeistaminen. Pinja ja Esa kertovat Matkakartan havainnollisesta mistä A3 paperille.</td>
</tr>
<tr>
<td>TYÖSKENTELE</td>
<td>9. Matkakartta n. klo 17:20-17:35 ja n. klo 17:35-17:55</td>
<td>Jokainen piirtää matkakarttansa A3 paperille, aloitaten vasemmasta alunurkasta ja päätyyn oikeaan ylänurkkaan. Piirtämisen jälkeen kerro parille omasta matkakartastasi. Piirtämiseen aikaa n. 15 min. Oman piirroksen purkuun parin kanssa aikaa n. 10 min/.hlö=n.20 min</td>
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<tr>
<td>18:40</td>
<td>kohdasta. N.10 min</td>
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<tr>
<td>PÄÄTÖS Loppukierros n. klo 18:50-19:00</td>
<td>Loppukierros: Millä mielellä lähdem?</td>
<td>Ryhmäläiset kertovat yksitellen. N 1 min/hlö</td>
</tr>
</tbody>
</table>

**Nimi:** Pinja Laitinen, Esa Rovio  
**Kurssi/tapaaminen:** Liikuntakynnyksen yli, Vauvaikäisten perheenäidit (Tampere, Pinjan ryhmä)  
**Aika:** ke 14.12.2011, 2 h., pikkujoulutapaaminen  
**Tavoitteet:** Yhteenveto haastatteluista ryhmäläisille – kokonaiskuva liikunta-aktiivisuuteen liittyvistä tekijöistä äitien kertomana. Valittujen teemojen työstäminen pienryhmissä.

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<tr>
<th>VAIHE</th>
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<th>AKTIVITEETT</th>
<th>PERUSTE</th>
<th>HAVAINNOT/JOHTOPÄÄT ÖKSET</th>
</tr>
</thead>
</table>
| ALOITUS (17:05-17:15) n. 10 min | **Esittely:** Tapaamisen tarkoituksen kertominen.  
**Alkukierros:** Mistä tilanteesta tulemme? | Kerro tapaaniseen teemat ja kiitä haastatteluista.  
**Orientoitus minen ryhmätapaamiseen ja työskentelyyn.** |
| SIIRTYMA I (17:15-17.20) | **Esittely:**  
- Työskentelytapojen esittely  
- Keskusteluteemoihi | Kerrotaan tapaaniskerran työskentelytavat ryhmäläisille liikunta-aktiivisuuden eri teemoista.  
**Orientoitus minen tapaanismo ja oman käsitelyksen muodosta.** |
## Tutustuminen


<table>
<thead>
<tr>
<th>TYÖSKENTELELY</th>
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<tbody>
<tr>
<td><strong>1. Liikunta-aktiivisuuteen liittyvät tärkeimmät havainnot teemoittain</strong> (17:20-18:00) n. 30 min</td>
</tr>
</tbody>
</table>

Tärkeimpien havaintojen, oivallusten, kysymysten, mieltä askarruttavien seikkojen ja kriittisten näkemysten esiin nostaminen liikunta-aktiivisuuteen liittyen

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<th>TYÖSKENTELELY</th>
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<tr>
<td><strong>Yksin:</strong> Jokainen valitsee itseelleen tärkeän/tärkeätteemat (1-2), joista haluaa keskustella tarkemmin parin tai pienryhmän kanssa. (2 min)</td>
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|**Pareittain tai pienryhmissä:** Pari tai pienryhmä keskustelee teemaan liittyen omista havainnoistaan tarkentaen teemaa. Pari / ryhmä kirjaa esiin nostamansa seikat paperille yhteisen keskustelun teemoiksi. (n. 30 min)

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<th>TYÖSKENTELELY</th>
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<tr>
<td><strong>Teeman esittely koko ryhmälle ja yhteinen keskustelu:</strong> Pienryhmä kertoo havaintonsa. Koko ryhmä kommentoi ja keskustelee teeman</td>
</tr>
</tbody>
</table>

Tavoitteen a on selvittää ryhmäläisten mielestä kiinnostavat huomioita haastattelussa esiin nostetuista sekä tarkentaa ilmiöitä ja niiden liittyvää havaintoja ja oivalluksia. Lopuksi yhteinen keskustelu teemoista.
<table>
<thead>
<tr>
<th>Aktiivisuusosio</th>
<th>Lyhyt yhteiskeskustelu valinnoista (5 min)</th>
<th>Lyhyt yhteiskeskustelu valinnoista (5 min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. PAATÖS (18:35-18:50) n. 15 min</td>
<td>Loppukierros: Millä mielellä lähdet? Yksitellen</td>
<td>Tapaamisen päätäminen</td>
</tr>
</tbody>
</table>
**Nimi:** Pinja Laitinen, Esa Rovio  
**Kurssi/tapaaminen:** Liikuntakynnyksen yli, toimintatutkimus, vauvaikäisten äitien ryhmä tapaaminen (TRE ryhmä, Pinjan ryhmä)  
**Aika:** ke 11.1.12, 2 h  
**Tavoitteet:** Ajankäytön, minä-teeman ja muutosprosessin syventäminen, tavoitteiden asettaminen ja tiedottaminen

<table>
<thead>
<tr>
<th>VAIHE</th>
<th>TAVOITE/AIHE</th>
<th>AKTIVITEETTI</th>
<th>PERUSTELUT ODOTUKSET</th>
<th>HAVAINNOT JOHTOPÄÄT ÖKSET</th>
</tr>
</thead>
</table>
| ALOITUS | 17.05-17.15  
10 min | Alkukierros: Mistä tilanteesta tulen?  
Ryhäläiset kertovat vuorotellen mistä tilanteesta ovat tapaamiseen tulleet (1 min/hlö = 8 min) | Kuulostella ryhmän/ryhmäläisten kuulumiset ja orientoituva tapaamiseen. |
| SIIRTYMÄ| 17.15-17.20  
| TYÖSKENTELELY  
13. Metaforatyöskentely  
17.20-17.40  
20 min | - oman tilanteen arvioiminen  
- ajankäytön, minä-teeman ja muutosprosessin syventäminen | Vertauskuvilla jatkanne saajat, syntyneestä asiainajatessä ensimmäisellä pyrimme syventämään ajankäyttöä ja toiselle minä-teemaa ja omaa muutosprosessia. Vertauskuvat |

Vertauskuvilla jatkanne syntynesteä asiainajatessa, ensimmäisellä pyrimme syventämään ajankäyttöä ja toiselle minä-teemaa ja omaa muutosprosessia. Vertauskuvat
<table>
<thead>
<tr>
<th></th>
<th>perheen aika on kuin)</th>
<th>johdattavat kokonaisvaltaisesti oman tilanteen arvioimiseen ja tavoitteiden asettamiseen (eli seuraavaan tehtävään).</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Tiedottaminen</td>
<td>1. RAY- rahoituksesta tiedottaminen (5 min) 2. Tiedottaminen Esan sairastumisesta ja mahdollisesta poissaoloista</td>
<td>1. - mahdollisuus tulla ohjaajaksi (vuosi 2013) - ryhmän vetämisestä saa ohjaajakoulut uksen - saa myös</td>
</tr>
<tr>
<td>VAIHE</td>
<td>TAVOITE/AIHE</td>
<td>AKTIVITEETTI</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>ALUITUS</td>
<td>n. klo 17.05-17.15</td>
<td>Alkukierros: Mistä tilanteesta tulen?</td>
</tr>
<tr>
<td>SIIRTYMÄ</td>
<td>n. klo 17.15-17.20</td>
<td>- tapaamisen tavoitteet</td>
</tr>
<tr>
<td>TYÖSKENTELEY</td>
<td>17. Loppumittaust</td>
<td>- Katsoa omia</td>
</tr>
</tbody>
</table>

**Nimi:** Pinja Laitinen, Esa Rovio  
**Kurssi/tapaaminen:** Liikuntakynnyksen Yli, Vauvaikäisten perheen äidit Tampere (Pinjan ryhmä)  
**Aika:** ke 7.3.2012, 2 h, viimeinen tapaaminen  
**Tavoitteet:** Toimintatutkimuksen ja prosessin reflektointi ja arviointi
| 19. Palaute n. klo 18.10-18.45 | - Pohtia mikä | - Pareittain |

|   |   |   |

| PÄÄTÖS n. klo 18.45 – 19.00 | Loppukierros: Millä mielellä lähden? | Jokainen kertoo vuorotellen. |