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# Supporting emotional development

Stress reduction in Early Childhood Education

Metropolia Ammattikorkeakoulu

Social Services

SP12S1

09.04.2016



Authors Title  Number of Pages Date	Elena Wahlsten & Nella Kytönummi Supporting emotional development- Stress reduction in Early Childhood Education 44 pages + 1 appendix Spring 2016
Degree	Social Services
Degree Programme	Bachelor of social services
Specialisation option	Early childhood education
Instructors	Sylvia Tast, Senior lecturer Eija Raatikainen, Senior lecturer

#### Abstract

The purpose of this functional thesis was to plan, implement and evaluate an activity model which could offer professionals of Early childhood education a tool for stress reduction that is able to evoke calmness and positive emotions in children inspired by the ideas of Mindfulness and the importance of learning self -regulation skills.

The relevance of this thesis is supported by the concerning phenomenon that many children experience negative stress-related effects in child day care. The labor market partner for this thesis was a private kindergarten in Helsinki Metropolitan area. In addition, development of empathy which is one of the main pedagogical objectives of the labor market partner was taken into consideration in the creation process of the exercises.

The main method used in the thesis is reflection which is based on tacit knowledge and collected data related to the subject from various sources such as scientific articles, books, theses, discussions with the labor market partner and active observation during the sessions.

Five different sessions were planned and conducted five different sessions for kindergarten children aged 4-5. According to the results the sessions were carried in an interesting manner for children and were able to support children's well-being during the day in day care. The guide booklet for conducting similar exercises was created and given to the labor market partner. According to the feedback of the personnel the guide booklet for the exercises aimed for kindergarten workers is clear and easy to use for conducting the sessions.

child's stress, stress reduction, mindfulness, meditation, self-	
regulation skills, early childhood education	



Tekijät Otsikko Sivumäärä Aika	Elena Wahlsten & Nella Kytönummi Supporting emotional development- Stress reduction in Early Childhood Education 44 sivua + 1 liite Kevät 2016
Tutkinto	Sosionomi
Koulutusohjelma	Sosiaaliala
Suuntatutumisvaihtoehto	Varhaiskasvatus
Ohjaajat	Sylvia Tast, lehtori Eija Raatikainen, lehtori

Tämän toiminnallisen opinnäytetyön tarkoituksena oli suunnitella, toteuttaa ja arvioida toiminta, joka voisi toimia stressin lievittämisen työkaluna varhaiskasvatuksen ammattilaisille, lisäämällä rauhallisuutta sekä positiivisia tunteita lapsissa. Kyseiset harjoitukset pohjautuvat itsesäätely- sekä tietoisuustaitojen kehittämiseen.

Tämän opinnäytetyön tärkeys ja ajankohtaisuus kytkeytyy huolestuttavaan ilmiöön, jonka mukaan monet lapset altistuvat stressin negatiivisille vaikutuksille päiväkodeissa lähes päivittäin. Työelämäkumppanina opinnäytetyöllemme oli eräs yksityinen päiväkoti pääkaupunkiseudulta. Lisäksi kyseisen päiväkodin yksi tärkeimmistä pedagogisista tavoitteista: empatian kehityksen tukeminen on otettu huomioon harjoitusten luomisessa.

Tärkein käytetty metodi opinnäytetyömme kirjoittamisessa oli hiljaiseen tietoon ja erilaisista lähteistä kerättyyn tietoon pohjautuva reflektio. Tietoa on koottu mm. tieteellisistä artikkeleista, alan kirjallisuudesta, opinnäytetöistä, keskusteluista varhaiskasvatusammattilaisten kanssa sekä aktiiviseen havainnointiin harjoitusten toteuttamisen aikana.

Suunnittelimme, toteutimme ja arvioimme viidestä sessiosta koostuvan 4-5 vuotiaille lapsille suunnatun kokonaisuuden. Tulosten mukaan sessiot olivat toteutettu kiinnostavalla tavalla ja soveltuvat lapsen hyvinvoinnin tukemiseen päiväkodissa. Lisäksi kokosimme ja tarjosimme ohjekirjasen samanlaisten harjoitusten toteuttamiseksi yhteistyökumppanillemme. Työntekijöille suunnatun kyselyn tulosten mukaan kyseinen ohjekirjanen on selkeä ja helppokäyttöinen.

	lapsen stressi, stressin lievitys, tietoinen läsnäolo, meditaatio, itsesäätelytaidot, varhaiskasvatus
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#### 1 Introduction

In children lays the future of our society and healthy childhood environments are building a stem for successful human growth and development. Experiences in early childhood carry long term or permanent effects on human's health. Especially consequences of a long termed, negative stress is able to impair successful undergoing through child's developmental stages and increases the risk of both physical and mental health problems in adulthood. (Sandberg, 2000). Functioning of the brain and social interactions of an adult human are strongly affected by experienced emotions in early childhood. (Mäntymaa, Luoma and Tamminen, 2003, pp.119 (6):459-465.) Parents and Early Childhood educators carry a major role and a great responsibility in creating healthy growing environments for children.

Leaning on our previous personal experience as kindergarten teachers, we affirm that children in day care encounter negative stress on daily basis and there is a great need for developing methods for children's relaxation and calming down during the day in child day care. Theoretical part of this thesis is leaning on self-regulation skills and mindfulness practice as stress reduction methods. Those methods were chosen due to our personal interest and experience of their utilization. In the thesis we discuss about child's negative stress and what are the factors which are causing it in day care. We discuss about harmful effects of stress on child's emotional development, learning and health in future and bring forward ideas of how a professional of early childhood education can improve a day care environment. The main suggestion in this thesis is that teaching self-regulation skills combined with mindfulness techniques can serve as an effective way for stress reduction for children.

Another important aim for this functional thesis was to plan, evaluate and present a set of new activities which can serve as a tool for evoking calmness and positive emotions in children, through teaching them self-regulation skills and mindfulness. According to the research of Schröder and Toppinen (2000), personnel of the kindergarten have a need for education related to practice of relaxation and calming down. The activities created by us consist of five different exercises that were conducted and evaluated in one day care center of a private sector with children aged-4-5. Each created session had its own theme associated with relaxation and guiding thoughts on positive images such as



nature, animals and friendship. The common aim of all sessions was to offer the participant children a simple way to calm down, experience positive emotions and rest from the noise and busy environment in kindergarten. In addition development of empathy which is one of the main pedagogical objectives of the partner kindergarten was taken in consideration in the creation process of the exercises.

## 2 Introduction to Early childhood education and care in Finland

National early childhood education and care strategy is a base for organizing early childhood education (ECEC) in Finland. Ministry of Education and Culture is responsible for administration and legislation governing. Quality, provision and supervision of ECEC is on the responsibility on municipalities. Early childhood education and care is an official term used for child day care services in Finland. The main function of early childhood education is defined as bringing up, teaching and care which aims to promote wellbeing of children, by supporting their balanced growth, development and learning. Day care is provided by the municipalities in day care centers, in family day care and in group family day care. (Ministry of Education and Culture, 2016).

The child day care services are available on a full-time or a part-time basis until the child is 7-years -old and parents whose children attend day care can receive care allowance for day-care fees. Maximum time for receiving child day care services on full-time basis is ten hours per day and five hours per day on a part-time basis. Payment for municipal day care is regulated by the government and varies according to the size of family, their income and a number of needed hours for day care. Alternative child care options are offered by NGO's, private sector and parishes. Private producer of day care decides about charges independently. (Ministry of Education and Care, 2016).

Qualification requirements for the personnel in all day care are set by the law and decree on qualification requirements of social care. Kindergarten teachers have a diploma from university or university of applied sciences. Other personnel of day care is required to have at least an upper secondary-level qualification in social welfare and health care. (Ministry of education and Health, 2016).

Individual language and cultural background of children are taken into consideration. Children whose mother tongue is Finnish, Swedish or Sami can receive day care in those languages. Different cultural- and language backgrounds are respected and integration



of children who come from other cultures and language backgrounds is reinforced through cooperation with representatives of their own culture. (Ministry of Education and Care, 2016).

## 2.1 Pedagogical aims in early childhood education

According to the Finish law, Day Care Act 2 a § (8.5.2015.580/2015), pedagogical aims of early childhood education are supporting the promotion of child's holistic growth, development, health and well-being in accordance with his/her age and development. The pedagogical aims support child's prerequisites for life-long learning, equality in education and realization of rich pedagogical activities for positive learning experiences, leaning on child's play, movement, arts and cultural heritage. The aims are securing healthy and safe environment for early childhood education that is enabling development and learning. Furthermore the objectives endorse methods that represent respect towards a children and develop their functioning in peer group, though guiding them towards ethically responsible behavior and respect towards other individuals.

The exercises developed in our thesis project aimed to corroborate children's chances to participate, develop their interpersonal skills and have an impact on issues related to her/him. We worked in interactive partnership with a child, his/her care giver in order to promote children's balanced development and holistic well-being.

## 2.2 Labor market partner

The labor market for this thesis was one child day care center in Helsinki metropolitan area. It is one of the day care units of a kindergarten chain from a private sector. The kindergarten was contacted in February 2016 with a proposal for organizing 5 sessions for children aged 4-5 as a part of the thesis project. The sessions took place in February and March 2016, after receiving permission for the project and authorization from parents of the invited children. Some of the themes for the sessions were designed according to one of the pedagogical objectives of the kindergarten, which is reinforcement of child's empathy.

The kindergarten has a pedagogical focus on social development and education of the children. Special attention is drawn to child's interaction with other children and adults.



Good manners, respect and friendliness towards others are emphasized in the up-bringing. Teaching manners includes greeting, thanking, apologizing, good eating manners and waiting for own turn. Bullying is intervened immediately and feelings of empathy are aimed to be awaked in a child. Disagreements are taught to be solved through a discussion.

The kindergarten promotes tolerance towards cultural diversity and cooperation skills through different activities. Children there are taught to understand that there are people who speak different languages and despite this one can learn to communicate with them. Clients of the kindergarten are different aged and come from different cultural backgrounds. Cooperation skills of the children are developed for example through small group work, playing different games and free play. Since there are very small children in the group, the older children are encouraged to help smaller children.

Development of a healthy self-esteem of the children is reinforced in the day care by accepting and respectful way of interaction with them, by showing appreciation and listening. Important task of professionals of the kindergarten is to show children that they are accepted and respected as they are.

## 3 Stress in day care

Adults carry a great responsibility in creating a harmonious growth environment for children. It is important that places such as daycare, where children spend long days, offer healthy prerequisites for development. (Keltinkangas-Järvinen, 2014). However, there are many factors that can cause negative stress in child day care. Child day care workers and children are often challenged by hectic circumstances, where securing stability requires more resources than there are available.

Negative stress in early childhood can be manifested in many ways and might carry serious consequences on child's health, for instance by causing learning difficulties and lowering stress tolerance in adulthood. (Keltinkangas-Järvinen, 2014).

#### 3.1 Child`s stress

This chapter is describing what child's negative stress is: on neurochemical level, how it can be noticed from behavior, where it derives from and what are the possible negative long-term effects that it carries on health and overall development of a child.



The foundation for child's health in future relies strongly on developmental processes in early childhood, therefore it is crucial for parents and professionals who work with children to develop methods that can help in recognizing, curing and preventing factors for negative stress and its effects on children. (Sandberg, 2000).

Stress that is often assumed to be caused by person's reaction to changes, carries a major impact on physical, neurological and cognitive development of a child. Harmful growth environment is the most common explanation for child's stress that effects on biological functioning of a child in long term and can increase the risk of both: mental and physical illnesses in the future, because of the natural patterns of human brain development. (Sandberg, 2000).

Human brain develops gradually from a brainstem to the cortex and functions in a hierarchy. Brain structure is arranged according to usage: development of undifferentiated neural systems are depending on neurochemical and hormonal factors, which in turn are connected to sensory experiences in childhood. Experiences in early childhood can affect permanently on the quantity of synaptic connections. Only frequently used connections remain, for example if nobody ever talks to the baby, she or he will never learn how to talk. Neurochemical processes during stress, such as a rush of hormones from adrenal glands can cause damage on cognitive functioning such as memory and its anatomical structures. Continuous stress can slow the cognitive development of a child which includes learning related to accuracy, linguistics, and intellectual functioning. (Sandberg, 2000).

Most commonly stress is considered to carry negative effects on human wellbeing, but there is a type of a positive stress as well, which is an important part in learning and development of an individual. Complete absence of stress can slow the development and growth, instead situations that include little stress are important triggers for learning. Positive stress requires supportive environment where individual is able to gain control over the situation and to deal with emotions in a constructive and a positive manner. Such situations can, for example, be short periods of separation from parents by changing environment, that include interesting experiences that evoke positive emotions. (Sandberg, 2000). In this thesis we are mainly focusing on negative type of a stress experienced in child day care.



Stress of a child can be divided in two groups: acute or chronic which are closely linked to each other. Acute stress can derive from an unexpected loss or an accident. Neuro-chemical effects of acute stress are often temporary, unless it develops into a chronic stress where the health damages can become permanent. Chronic stress, in turn is often a result of a harmful long-term living environment such as living in a family with negative relationship dynamics. For example, physical and psychological diseases of family members can create a harmful environment for a child. Continuous stress can raise the risk of psych iatrical problems of youth. (Sandberg, 2000).

Recognizing stress and whether it is chronic or acute can sometimes be challenging for kindergarten workers and that is why cooperation between parents and professionals is crucial. Children who have experienced continuous stress are often restless, numb or hyperactive, because their brain developed is hypersensitive and strongly reactive (Sandberg, 2000).

Symptoms of an acute stress might be manifested through sleeping difficulties, problems with concentration and learning, experiencing different fears, escaping and stealing. A child can behave in a restless manner, cry, and be irritated and forgetful. In turn, chronical symptoms' of a child's stress can be more difficult to define. It can be unfolded through different unidentified pain experiences in a body, changes in appetite, learning difficulties, urination, besmearing and seeing nightmares. (Sajaniemi et al., 2015; Sandberg 2000).

One of the most common methods to measure stress is to pay attention to person's changes in life such as in his social and physical environment. However estimating child's stress relying solely on life changes is not reliable enough, because child's growth and development is requiring many inner and outer changes. For measuring stress there are various survey and interview based methods that most commonly focus on stress which derives from harmful and permanent growth environments as an unemployment, an illness or a criminal background of parents. The most widely applied systems for systematic measuring of stress are developed by American Psychiatric Association (1994) and World Health Organization (1992) that define child's stress through viewing different psychological and physical factors that are predisposing for stress. (Sandberg, 2000).

Stress can impair successful undergoing through child's development stages and increases the risk of both physical and mental health problems. Children who are exposed



to the stress are more likely to get sick and have a weaker immunity against different infections. (Sandberg, 2000).

Stress is a crucial defense mechanism that is serving a human in threatening situations. It is an important characteristic of our biological functioning that increases person's ability to run, fight or freeze. However, very often it can be activated in situations where those reaction are not needed. Adults should be aware of those reactions in children and be able to support a child when negative effects of stress occur. (Sajaniemi, et al., 2015). Supporting a child in calming down, guiding him/her to focus on something positive and discussing about emotions can be used as methods for stress reduction.

#### 3.2 Stress factors in a child day care

This chapter is discussing about the sum of various factors that create conditions where a child day care becomes a busy environment and carries a high risk in causing stress related issues for both children and workers. Concern about this problem is leaning on our previous, personal experience of work as kindergarten teachers. In our view, existence of stress related problems and methods for solving them are not discussed widely enough in Finland. Most commonly day care is pictured as a place where children play in a harmonious atmosphere, however there are many indicators that show signs of anxiety in child day care services (Sajaniemi et al., 2015). Stress causing factors can be a large number of children in groups, noise, lack and sick leaves of workers and settling of a child to a new environment. Other stress causing factors can be related to poor information flow between personnel, unsuitable premises for day care and an environment with a predisposition to infections due to a great number of daily social contacts. (Sajaniemi et al., 2015).

## 3.2.1 Large groups of children

Day care environment can be a busy place due to a great number of children in groups. When working in kindergarten it is clear to see that large groups of children are increasing restlessness. One of the reasons for that is that children in large day care groups have to wait longer for their turn to have their basic needs met and are receiving less attention from adults. Therefore children have a greater need in developing different means to draw attention them. In order to reinforce chances for meeting their basic



needs, children attempt to draw attention through negative behavior. Such as screaming and bullying. Increased need for attention does not leave space for positive interaction such as calm, direct contact between individuals. (Sajaniemi, et al., 2015). That is one of the many reasons why maintaining balance in a large group of children can be very demanding.

According to the Day Care Act 6 § (21.8.1992/806) ratio between workers and children is 1/4 with children under 3 -years-old and 1/8 with over 3-year old children. Group should not be in size for more than three workers. The law is allowing short- termed deflection from ratio. However in this matter short-termed is not clearly defined. According to our personal work experience in different day care centers, small changes in ratio of personnel and children carries a major effect on a fluency of the day.

Days in kindergarten become especially challenging when there are no clear, common methods and structure for managing situations where personnel is missing. Therefore when workers understand a need for common, clear rules and structures, large group can be managed more easily. Through anticipation of situations and being familiar with common structure, restlessness can be reduced. Stress can be lowered when personnel and children are aware of what is to be expected.

Another effective way for calming a hectic atmosphere in day care is by dividing a large group to smaller parts. For example, furniture can be used for division of playing areas. Children are active learners who learn through interaction with different people and environments (Janttunen, 2011:10). Interactional activities are challenging to be organized in large groups of children. Smaller groups allow to create more genuine and child-oriented learning experiences, where children `s developmental stages and needs can be taken in consideration in more effective manner (Janttunen, 2011:10).

## 3.2.2 Lack of human resources

Lack of human resources is often caused by sick leaves of personnel, which a common problem for professions such as kindergarten teacher or a nurse, where the number of daily face-to-face social contacts is high. In addition, worker's motivation is at risk when a worker is facing many challenges, while struggling with limited resources.

According to Day Care Act 6 § (21.8.1992/806), the groups of children are allowed to be larger than of 20 children. Work in child day care includes close physical contact with



children, especially with babies, with whom the main work is focused on meeting their basic needs. Small children have a tendency for to be taken ill by different sorts of bacteria and viruses, since it is a crucial part of the development of their immunity system. In addition, social contacts with parents are important part of the work in day care. Health issues cause tiredness and stress for both workers and children in child day care. In turn, there is a greater possibility to become sick while experiencing stress: it has a close connection to virus infections, such as acute infections of respiratory tract. (Turner Cobb ja Steptoe, 1998).

When a day care is constantly missing personnel, workers are often challenged to manage with chaos in groups. Lack of personnel demands to draw attention away from the quality of activities and interaction with children, instead the focus is required to be on children's basic care needs.

According to our experiences of work in child day care, individual work motivation and the quality of social interactions between personnel in a group have a great effect on human resources. Well-being and health of workers can be reinforced when they are experiencing, that they are able to conduct their work well and are working in cooperation. Instead, if workers have to face continuous lack of prerequisites for conducting their work successfully and are experiencing loneliness when facing challenges at work, work-load might be experienced as more demanding. We have noticed that very often information flow between stressed and tired workers does not work well and leads to misunderstandings and poorly structured working methods. Not being able to do the work properly due to the lack of human resources is causing lack of motivation at work, stress and overall damage on kindergarten worker's well-being.

#### 3.2.3 Noise

Noise is creating hectic atmosphere which is decreasing child's sense of security. Clear daily structure is an effective way to reduce noise levels. Routines bring children a sense of security. (Sajaniemi, et al., 2015, p. 94-97).

High noise levels is child day care groups are demanding children to compete with each other in order to receive attention from an adult. Both workers and children need to speak in high tone to get their messages across (Jarasto, et al., 1999, p.45). Premises of day care centers are often small and might not have enough room or personnel to divide the



group for lowering the noise level. Some workers use earplugs for protection of their hearing.

Most effective way of preventing hearing damage of children and personnel would be through taking into consideration the premises of day care in order to find solutions for lowering the noise level. Without stress, caused by loud noise, personnel would be able to meet their pedagogical aims more effectively. (Yle, 2015).

#### 3.2.4 Multi-tasked work

Workers in kindergartens have other tasks in addition to watching after children. Most of those tasks do not have any effect on the ratio between workers and children set by the Finnish law. The additional tasks are for example taking part in staff meetings, trainings, and paperwork, exchanging information with parents, planning different activities, preparing work material, and cooperating with early childhood educator for children with special needs or a language teacher. There are also a lot of basic daily work such as cleaning, serving food etc. In our view, feeling of helplessness is what the most workers in many child day care centers experience almost daily. Instead of making work in calm atmosphere, workers have to be in a constant worry, that children cannot meet their basic needs properly. In our view, daily, clear and flexible division of labor is crucial for the fluency of work.

#### 3.2.5 Premises for child day care centers

Finding suitable premises for arranging day care is a challenge in Helsinki metropolitan area. Premises need to be spacious enough for children to move, play and explore freely. Room for children needs to be plain, so that they can be looked after easily. That requirement is not always met and such premises create a greater danger to get injured for both children and workers, when there are a lot of children with poor movement skills in the constricted and complex premises. Moving and exploring the environment freely is important for child's development. Motoric skills vary largely between children. For the development of a child, it is important that the physical features of the environment meet child's need for different activities (Nurmi, et al., 2009, p.26–27). Because of a greater risk for injury, poorly structured premises demand more attention from personnel to look



after children in order to prevent accidents and that is drawing resources from arranging activities of a high quality.

## 4 Emotional development

Child's developing understanding of self is related to his/her ability to experience different emotions. Children in early childhood are able to control their emotions and endeavor to understand emotions and behavior of others. Early childhood is an important phase of human's emotional development. At age 4 to 5 children become better at recognizing connections between emotions and facial expressions and their skills to describe emotions increases rapidly. In addition, they are able to understand a need for managing their emotions and describe their ways of coping with stress. (Santrock, 2014, p.288). Adult has an important role in teaching a child how to manage with emotions of own and other people. It is important to allow children to talk about their experiences, feelings and reassure them that they are natural. (Santrock, 2014, p.291). Child's empathy, an ability to understand feelings of other people is both: inborn and learned trait. Support and guidance are important for development of child's emotional development, understanding of self and others.

## 4.1 Learning and brain development in early childhood

This chapter consist of a short introduction to brain development and learning in early childhood. For the professional of early childhood education it is important to understand the processes of learning and development of a child in order to be able to produce enriching learning experiences. There lays a great responsibility on parents and early childhood educators, for early childhood is the phase of life when the foundation of the psychological health is built. It is scientifically proven that the first few years of life contain the most important phases of physical brain development and the process is accomplished approximately at age of 12 (Call and Featherstone, 2010, pp.13-14).

With Early Childhood or preschool years it is referred to a child's developmental period, from infancy until 6-years. During that period child's development is leaning on learning self-sufficiency and self-care. In that age child is practicing skills for school, such as



learning letters and following instructions. In addition interaction with peers carries an important role. (Santrock, 2014 p.14).

Human development stems from interaction between three processes which are biological, cognitive and socioemotional factors of human functioning. Changes in human body, such as physical growth and hormonal functioning are manifested by the biological processes. Cognitive processes, in turn, are related to changes in thoughts, language and intelligence. (Santrock, 2014).

The foundation for psychological development of a child consists of complex connections between brain development, social interaction, emotions and their effects on a child in his or her early childhood. It is a sum of genetic, biological and psychosocial factors and early experiences of social interactions. Interaction and emotional experiences in early age are the foundation for a holistic development and growth. Functioning of the brain and social interactions of a human are strongly affected by experienced emotions in early childhood. (Mäntymaa, Luoma and Tamminen, 2003, pp.119 (6):459-465).

Brain is built of mainly three parts: the brain stem, the limbic system and the cerebral cortex which work in a complex cooperation for processing information received from emotional reactions, sense experiences and memory. Brain contains about one hundred billion neurons: nerve cells that function in collaboration for processing the information for understanding, problem solving and learning. Axons are items produced by neurons that function for disseminating information for neurons and dendrites. Learning process on the macro level of the brain happens through repeated actions. Repeated thought patterns create synapses that are stronger connections between neurons: tracks from axons to dendrites. When those macro connections responsible for some particular challenge have become strong enough, the learning have happened and brain is ready to face further challenges. Neurons that do not create synapses die. (Call and Featherstone, 2010, pp.13-14).

Progressing neurobiological research underlines the importance of emotional experiences in early childhood for the growth and development of an individual through his whole life. Early social interactions carry a lifelong effect on an individual and that is why successful cooperation between different sectors should allow support and care according to child's needs. Teaching emotional and behavioral management for children can



carry a major role for balanced growth and development. (Mäntymaa, Luoma and Tamminen, 2003, pp.119 (6):459-465).

## 4.2 What are self-regulation skills?

Self-Regulation skills mean the ability to control and adjust own behavior to the environment. It is one of the most important skills in life. It helps to accomplish goals, work with other people and increases the ability to choose better ways to control own behavior through a whole life span. Learning self-regulation skills helps to control own emotions and actions that carry a major effect on all interactions with people. (Aro, 2011, pp.6-17).

There is a great number of theories about self-regulation presented by different researchers. Our view about teaching self-regulation skills stems from studies conducted by Finish research of self-regulation skills in early childhood education. (Aro and Laakso, 2011).

Child's cognitive development is a stem for learning self-regulation skills. Linguistic skills of an individual affect their understanding of own emotions. When an adult is naming different emotions, a child is becomes able to recognize them and name them later by himself. (Aro and Määttä, 2011, pp.42-43). The most sensitive period for learning self-regulation skills ends at the age of 4. Strong potential for learning self-regulation skills exists during the first 4 years, after which learning the skills becomes more challenging. It is important to guide a child towards learning how to control his actions, since self-regulation skills develop solely through interaction with other people. Self-regulation is a stem for good social skills and healthy relationships. It is divided mainly to three different parts: ability to understand own emotions, control them and act in a socially acceptable way. In other words it is about being aware of other people, environment, considering and remembering outcomes of own behavior. (Ahonen, 2011, pp. 6-17).

Good self-regulation basically means the ability to understand own emotions and learn how to express them in acceptable way. A person who has skills how to control his/her emotions, owns the ability to solve problems with people without being arrogant. Controlling own behavior allows the learning of societal rules. It is important that each individual can be aware of own behavior and its effects on other people in order to increase overall well-being. Development of social and emotional intelligence is a life-long learning process, which has its roots in person's early childhood. When child is able to receive



a good example of good self-regulation he/she has a greater chance for building strong friendships, achieving goals, succeed in learning and have a good self-esteem in future.

The challenges for self- regulation stem from negative emotions, such as anger, frustration and sadness. These emotions are difficult to control, that is why learning and finding socially acceptable way to express them needs guidance from adults. Children need to be advised and reminded many times before self-regulation becomes a natural part of their way of acting. When a child starts to understand consequences of their actions the ability to control themselves becomes stronger. (Aro, 2011).

## 4.3 Self- regulation for reducing stress

Children in early years often behave in an impulsive manner since they do not have skills on how to deal with their emotions yet. Teaching children how to manage with emotions is one of the most important challenges of parents and child oriented practitioners. There are many types of activities which can support children's copying skills for dealing with emotions such a play and games that involve role play, fantasy games, 'what if 'scenario, waiting for your own turn etc.(Call and Featherstone, 2010, p.43).

Yu. V. Scherbatykh (2006) conducted a research about the connection between self-regulation skills and stress management. He went to a school to the class that had an exam that day. Before the exam he divided the class in two and invited one half for his relaxation lesson. He told them about self-regulation and gave them some exercises for processing their emotions related the upcoming exam. They went through emotions related to the exam and conducted relaxation exercises. Children who got better grades for the exam, were those who took part in his relaxation lesson. Those children were also more confident about succeeding in the exam than the other half who did not take part in the relaxation exercises.

If adults are not controlling their actions or emotions, it affects children immediately. For example, bringing a child to a day care in a rush is causing a child to experience negative stress. In addition to negative emotions, a child receives an example from his/her parent: to act in a hectic way. (Laakso, 2011, pp. 63-65).

Parents are often challenged with balancing work, hobbies and other needs of a family. Effective way to avoid stress in family can be in finding ways to relax, learning time



management and arranging time when children can receive full attention from a parent. When parents or other significant adults such as workers in day care demonstrate frustration, anger or other negative emotions, there is a great risk that children are going to experience negative stress. Often, as a result children start to avoid this adult, however copying the negative behavior. Adult's inability to control his/her emotions and actions, is a factor that creates an unstable environment for a child. Child experiencing negative stress cannot learn effectively. It is more difficult to concentrate and give space to own thoughts while experiencing negative stress. When an adult is causing emotional distress in a group, he is teaching children a way how to act in a negative manner. It is a great challenge to avoid stress, especially when staff lacks of self-regulation skills, sensitivity and professionalism. (Aro, 2011).

Very often children are causing stress to each other. For example if one child has an emotional rush and behaves aggressively it might scare other children and cause rest-lessness. For workers it is important to have basic, common rules and working methods, so that they are able to predict and control situations together in order avoid unnecessary conflicts. Such methods for example can be dividing groups into smaller parts and finding different ways to calm children. (Rautamies, et al., 2011, pp.192-213).

In this thesis we describe the creation process of methods that are aiming to help in calming down a day care atmosphere. The methods are related to the set of exercises inspired by mindfulness techniques that can help a child to reduce stress levels through guiding focus on positive things. In the exercises we also attempt to support children's learning of self-regulation skills. The aim was to evaluate whether the relaxation exercises in a small group can bring a soothing effect on the participant children. We are hoping that the labor market partner for the thesis will be able to apply the exercises to support the calmness during days in kindergarten.

## 5 Introduction to mindfulness

#### 5.1 What is mindfulness?

Attention and awareness are natural features of human functioning. Mindfulness can be described as an encouraged awareness for current reality. Christopher Willard (2010) describes mindfulness as an awareness and curiosity with which children often view the



world. It is a practice that can offer an opportunity to access our own inner resources for insight, transformation and healing by practicing being fully awake in our lives, paying attention with intention and without judgement. (Bangor University, 2016). There are various types of exercises that can reinforce person's ability to draw his attention to the present moment. Mindful state of mind is conscious and accepting observation which is taking place in the present moment which fosters awareness, clarity and acceptance of the present reality (Kabat-Zinn, 2004, p.22). In addition many philosophical, psychological and spiritual doctrines underline the relevance of the quality of consciousness for the reinforcement of well-being (Wilber, 2000).

The connection of consciousness for well-being of human beings is significant due to the fact that nearly every individual is able to experience conscious perception that is to be aware and attentive. According to Brown and Ryan (2003, p.822) nearly every individual has the capacity to be conscious and aware. Additionally they assume that individuals differ in their proclivity or willingness to be aware and to sustain attention to what is occurring in the present. This ability to be aware varies in different individuals, because it can be developed or weakened by various factors. According to their research, mindfulness is a reliably and validly measured characteristic that has an important role in a variety of aspects of mental health.

#### 5.2 Mindfulness research

Nowadays many studies are showing that practicing Mindfulness facilitates a range of positive effects on psychological and physical well-being. Recent studies demonstrate how mindfulness can reduce emotional turbulence in bipolar disorder, health anxiety and suicidality in depression (University of Oxford, 2016). Scientific research of mindfulness practice indicates on physical and psychological benefits (Bangor University, 2016). Today mindfulness is gaining a solid background in scientific research and is a foundation for the range of institutions that are dedicated to practicing, researching or teaching mindfulness. The largest research and educational centers that are dedicated to examination and teaching mindfulness are Oxford Mindfulness Centre and the Centre for Mindfulness Research and Practice in the Bangor University. The both centers are representing the frontier of research and medical education in regard to practices based on conscious awareness. (Kabat-Zinn, 2010, p. 12).



The Oxford Mindfulness Centre is an international education and research center within Oxford University's Department of Psychiatry that cooperates with international partners to prevent depression and improve human potential through the therapeutic utilization of mindfulness. Mindfulness Based Cognitive Therapy (MBCT) which was developed through research in the University of Oxford is becoming a choice for prevention of recurrent depression in the UK National Health Service. (University of Oxford, 2016).

Centre for Mindfulness Research and Practice (CMRP), in turn functions under Bangor University and is the first place in the UK to offer professional training in the field on mindfulness and is one of the leading organizations for the delivery of training programs. (Bangor University, 2016).

CMPR supports and develops the knowledge base of the impacts of practicing mindfulness through accurate research measuring the effects of various mindfulness-based intervention methods. The research is focused on mindfulness based interventions in prevention of illness, clinical treatment and reinforcement of wellbeing. Most of their research is conducted through cooperation between different disciplines which unites health services and intervention evaluation, study of neuro-cognitive and psychological effects of the mindfulness practice and methods examining experimental aspects of mindfulness. (Bangor University, 2016).

#### 5.3 Mindfulness for children

In our view children should be able to play and explore environments in calmness. In order to help a child to experience calmness, positive emotions and balance a busy life style, an adult can practice mindfulness together with a child. It can be done through various simple exercises where awareness can be reinforced through drawing attention to one subject, an activity or any experience that is taking place in the present moment. There are different exercises that can help children to concentrate on one thing at the time. For example music, books, acting and dancing can be applied as tools to support the mindfulness practice. According to Willard (2010) nearly any activity can be done in conscious awareness. Applying mindfulness practice with children is able to develop their concentration skills, self- awareness and reinforce deep relaxation that have a great role against negative stress. Mindfulness can be added to daily lives simply. In child day care mindfulness could be practiced during a morning circle or before and during resting time.



Child's mind is highly creative because of it is strong imagination. In addition to their continuous, spontaneous active use of imagination, they can easily imagine things that are suggested to them. An adult is able to guide a child to focus on a subject or an object. Conscious guidance of child's thoughts on something pleasant can reinforce a child to experience positive emotions. For example an adult could apply exercises where a child is guided to imagine him or herself in a beautiful and peaceful environment. (Sajaniemi et al., 2015).

According to Yaffa (2016) if an exercise for imagination is conducted successfully, the reactions in the body are the same as if the experiences were really happening. Real surroundings, through our vision, are always presented to us in our minds, and our bodies react to them depending of our way of perception. Due to the strong connection between our body and mind, our mental states manifest themselves in our body in various ways. Negative emotions such as stress weakens our immune system and can cause different kinds of pain experiences such as head ache, muscle pain and changes in digester. In turn positive emotions and relaxation serve as a preventative medicine for stress that can be combined in an exercise for our imagination. (Yaffa, 2016).

Applying Mindfulness in pedagogy is becoming more common in Finland as well. There are teachers who have combined mindfulness practice with their teaching. According to Pirjo Lamella-Räisänen from Normaalikoulu in Turku and Samu Sundqvist, a class teacher and master of educational science, mindfulness is a tool for reinforcing calmness and concentration skills of children. Lamella- Räisänen describes mindfulness as a continuous awareness which happens through paying attention to own senses and emotions and an ability to calm one's mind and focus on present moment. (Mänttäri, 2013).

## 5.3.1 Techniques for conscious awareness

There are many ways to reach a mindful state of mind. To reach the state of continuous awareness there are various exercises that stem from meditation such as scanning body parts, yoga, conscious eating, walking, breathing etc. (Kabat-Zinn, 2004). In the exercises that we conducted with children we attempted to guide children towards continuous



awareness through exercises, where we focused on scanning body parts, different sensations, sounds of nature and emotions.

#### 5.3.2 Meditation

Meditation that has its roots in Buddhism has been gaining popularity in Western world rapidly as an effective method for stress reduction. Benefits of meditation for stress reduction and improving of mental health have a strong foundation in scientific research. (Kabat-Zinn, 2004).

Meditation is one of the forms of practicing Mindfulness. The main aim of meditation is to practice awareness through drawing attention to one or few targets. Such targets of attention can for example be surrounding sounds, a picture, own thoughts, emotions or breathing. The focusing can be targeted on one thing separately or many things at the same time. The idea of mediation is to focus on some particular subject or objects with acceptance and lack of any judgement. (Kabat-Zinn, 2004). In our planned exercises for children we have applied principles of meditation in each of our exercises.

Meditation can serve as an effective tool for reinforcement of self-regulation skills: by helping individuals to control their negative moods such as irritation or aggression. It can help to improve relationships and concentration through increased emotional control, self-esteem and alertness. (Meditation, 2008).

## 5.3.3 Metta meditation for empathy

In Bali language "Metta bhavana" means developing of love, friendliness and kindness. Metta meditation is one of the most important Buddhist practices which is a meditation of loving kindness. The aim of Metta meditation aims to cultivate our capacity of experiencing sincere care and empathy towards oneself or/and other living creatures. It is leaning on the thought that people are able to cultivate good in them by practicing it. (Metta, 2013).

Metta meditation involves sending our wishes for the well-being and happiness for ourselves or others (Metta, 2013). Two of our guided sessions included short Metta meditation. Through Metta we encouraged children to act kindly towards each other. Since empathy is one of the most important pedagogical aims of our partner kindergarten,



those exercises were strongly encouraged by the early childhood educators of the kindergarten.

#### 6 Guided Sessions for stress reduction in day care

## 6.1 Pedagogical tools

Next we describe the factors that we wanted to pay special attention to when planning the sessions. Leaning on our previous experience of work with children aged 4-5, we were aware of possible challenges that might face us during the conduction of the sessions. By preparing ourselves well we wanted to make sure that children will be able to receive a pleasant learning experiences. Thus our previous knowledge of practical pedagogical tools was used to support children's learning process. Such tools are related to challenges in maintaining children's attention, way of communication and understanding the importance of movement. In addition soothing effect of nature was utilized in the exercises.

#### 6.1.1 Maintaining attention

It can be a great challenge to maintain children's attention, since children tend to make a lot of physical movements and get easily distracted when it is required to focus on one activity. Mostly children play independently, are curious and get interested in new objects and activities, but holding attention for long is rare for their focus moves quick from one target of interest to another. Difficulties to draw and maintain child's attention is a common challenge during some guided programs. Especially when a practitioner does not have a long experience in conducting guided activities for children it is important to be prepared to face challenges to maintain children's interest and learn some tactics that can draw their attention back to the activity. (Call and Featherstone, 2010, p.89).

According to our consideration based on previous experience of work as kindergarten teachers, we decided to invite not more than five participants for the sessions. Children copy behavior fast that is why naturally the more children are taking part in some activity which requires concentration, the more a practitioner is challenged in creation of a smooth learning experience.



Children are usually not able to concentrate on one activity for long. That is why activities should not be planned to be long. It is useful to plan an activity that is separated in smaller parts, with planned transitions between the sessions. Realistic length for one session for 4-5- year old children is about 3 to 6 minutes. (Call and Featherstone, 2010, p.96). The planned duration for our sessions was about 5 minutes.

Beginning of the activity plays a key role in awakening child's interest. One of the advice for the practitioners is not to speak when attention is not payed to him/her because speaking during the noise gives a sign that it is acceptable not to be silent during the activity. (Call and Featherstone, 2010, p.89). Another good way to start a activity is to give a big picture of a session, by showing some clues about what is going to happen next, for example through showing pictures, using catchy phrases, interesting gestures or by asking open ended questions in order to evoke curiosity. (Call and Featherstone, 2010, p.96). We payed attention on how we interact with children also prior to the sessions.

When arriving to the labor market kindergarten, we made sure that we give enough time for chatting with children in order to get them prepared for what kind of an activity is about to take place. Interaction included asking how are they, discussions about their interests, telling some funny stories as ice breakers and creating a good interaction. Only after talking to each participant's child we proceeded to introduction of what that are we going to do next. We also connected a new information to children's prior knowledge: by remembering previous conducted sessions or talking about children's experiences related to the subject. "Do you remember what we did last time?" "What did we learn?" "Today we are going to listen to birds singing and rest in a magical forest".

There are different types of learners: visual, auditory or kinesthetic. It can be useful to try different methods of starting the session with a catchy introduction. One good way to start a session for auditory learners is by clapping hands, starting with loud clapping that becomes more quite gradually or creating a rhythm by clicking fingers encouraging children to follow. Rhymes, songs and repetition of some key phrases can be helpful. For visual learners showing different images and movements can be a good way to catch attention before speaking. Also for kinesthetic learners: making big circle movements with hands or tapping facial parts encouraging children to copy can help them to focus. (Call and Featherstone, 2010, p.90). Usually the participant children were happy to meet us and start the sessions, but naturally there were challenges for them to focus.



When the children's attention got distracted, rhymes, songs and movements were practical tools to catch their attention back and guide it back to the session.

After giving a big picture of what is about to take place, it is good to see was the information understood by the children. (Call and Featherstone, 2010, p.90). Before starting the sessions we ensured that children understand what is to be expected through asking.

## 6.1.2 Way of communication

The way of speaking is an important part in creation of a positive learning experience. Adult's speech to a child carries a great effect on child's development of self-esteem and motivation. Positive statements are proven to improve negative behavior. Soothing, positive speech does not allow children's primitive 'attack' defenses to be activated when encouraging one to do something. (Call and Featherstone, 2010, p.100). During the relaxation sessions, it was paid a special attention to our speech: the manner of pronunciation, used words and a tone of voice. Naturally we were aiming to conduct a soothing, slow and peaceful guidance during the relaxation sessions. Language is an important tool in building up a positive atmosphere. On each meeting, we remembered to thank and give positive feedback to the participant children. Observing each other during the sessions and watching video recordings after sessions helped us to evaluate our performance and get better prepared to the following sessions.

#### 6.1.3 Importance of movement

Children make much movements because it is an essential part of learning for it carries an important effect on child's brain development. It is an aspect that we wanted to take in consideration when planning the activity for target group aged 4-5. Through movement child is developing his motor skills and is exploring his environment. Before a child turns 3 years it is highly challenging for a child to sit still while focused on one subject. Children aged above 3 years are capable to learn well while being still for short periods of time. Children of 3-4-5- year have clearly better skills for longer concentration. Gradual increase of demand for children to focus while being still grows with their maturing. (Call and Featherstone, 2010, p.120). Although the planned relaxation exercises have a



strong focus on calming down, resting and being still, they were combined with phases where guided play with movement took place.

There is a great number of research that proves the benefits of a physical exercise on holistic well-being: as an effective method in reducing stress levels. Movement increases the receiving of oxygen to the brain, which is using a great amount of body `s oxygen supply. Movement decreases stress hormones such as adrenaline and cortisone, and rises the levels of endorphin, a hormone that is related to experiencing pleasure, happiness and is body's natural mood elevators and reducer of pain. Especially cortisol is not useful if we want a child to be in a calm and positive mood. Exercise seems to increase of neurotrophins in the body, which activate nerve cell growth and increase neural connections. (Harvard Health Publications, 2011). Many of the sessions that we conducted with children included an active part by the end of it. The active part consisted of play that included brisk movement such as imaginary swimming and fishing.

## 6.1.4 Applying soothing effect of nature

Nature has a calming, soothing and an inspiring effect on human being. Rickhard Louv (2008) wrote a book where he embraces effects of nature on children. Nature increases optimism, creativity, independence, self-confidence, concentration, capacity for cooperation, compassion, security, the sense of belonging and friendship. Natural environment is inspiring children's creativity and ingenuity. Pajanen (2011) suggests that creation of nature like environment indoors can be a good solution, when there is no possibility to access nature physically. Our exercises had a strong focus on nature. Nearly each of our sessions included listening to sounds nature. Many of the exercises included guidance to image nature such as forest, jungle, ocean, river, rain and animals.

## 6.2 Planning the sessions

We had a vision to conduct exercises based on mindfulness and self- regulation skills for children in early childhood, before having a labor market partner for the thesis. After finding a suitable day care center for the project, we had several discussions with its professionals, before the ideas for the sessions became more defined. We have planned the first two of the sessions before hand and based them on mindfulness practice.



We left the rest 3 sessions to be planned after we have met the participant children and gained an understanding of their needs. During the first two sessions, we payed special attention to observing their behavior. We tried to learn what the most effective ways to maintain their attention are and asked them many questions in order to define their interests. We applied sensitive and child oriented approach in planning of the activity.

## 6.3 Objectives and data for the sessions

When planning an activity a professional has to set goals that support growth and development of children (Jantunen, 2011, p.10). Our practice with children was based on mindfulness and self-regulation for kindergarten children aged 4-5. It was supported with information about various aspects that effect on children's well-being and methods for stress reduction. Those aspects are introduced to the reader in this thesis and are related to the pedagogical objectives of early childhood education in Finland, pedagogical focus of the labor market partner for this thesis and information about daycare environment.

Foundation for the exercises was supported with the information about children's emotional development in early childhood, relation of mindfulness practice and self- regulation to well-being and stress reduction. Data was collected from different sources such as scientific articles, books, thesis's and internet sources.

Information about kindergarten environment and children's needs supported the creative process of planning the activity that aimed to adapt mindfulness practice and learning self-regulation skills to child's way of perception.

Pedagogical objectives of the labor market partner were taken in consideration when choosing the content for the sessions. There were several discussions that took place prior to the conduction of the sessions with the kindergarten workers from the labor market partner. The discussions clarified the aims for the sessions and introduced us to the daily structure, activities and pedagogical aims of the kindergarten.



#### 7 Conduction of the sessions

## 7.1 Resting in the forest

The first session was conducted on the 6th of March 2016. There were three participant children: two 5 year old girls and one 4 year old girl. Discussion with a kindergarten teacher took place prior to conducting the session. She showed a room for the sessions and gave some advice on how to approach each participant child.

We started with introducing ourselves to children and explaining what we are planning to do. We also asked their names, ages and what are their favorite hobbies. The children seemed to be exited to meet us and were willing to try a new activity that we explained to them is relaxing and fun. Then we went to the room arranged for the sessions: with pillows and matrices so that each could sit or lay comfortably. We switched the sounds of the forest on the computer and told children to imagine that we have arrived to a magical forest in order to calm down and rest. We sat down and told children to sit or lay down comfortably on their pillows with eyes closed and imagine that we are laying on a green grass. Children seemed to be interested, but finding a comfortable position took time for some children.

When children settled down comfortably, one of us started to guide them to relax by iterating the body parts: "legs are resting, knees are resting etc." Children were laying peacefully without any interrupting of the session. After iteration of body parts we told children to listen to the sounds of the forest. After they have listened to the sound of the forest for 10 minutes we told them that we have rested well now and we can slowly start moving, stretching and open our eyes. Children seemed to be very relaxed: none of them raised quickly after the session. They continued to lay with their eyes opened. One of them said that he was sleeping. Another said that he saw a bird. After the session we asked them, what they thought of the exercise, with plain questions: "Was it nice or not?" Did you rest well?" and "How do you feel now?" "What shall we play next time?"

The responses after the session were positive: "It was a nice game", "I am rested", "and I was kind of sleeping."



#### 7.2 Boat in the ocean

The second session was conducted on 6th of March 2016, on the same day as the first session. There has been a brake for an hour between the sessions. The participants were the same children aged 4, 5 and 5.

The idea for this session was to guide children to imagine that they are on a sailing boat in the middle of the ocean. After introduction of what kind of imaginary game we are about to play to children, we turned sounds of an ocean waves and laid down on matrasses. Since the idea was to imagine that we are sailing on boats and children we restlessly distracting each other, we decided to separate the children from each other by offering them a chance to go to their own beds. It was helpful, since children were pleased that they had their own "boats". It took about 5 minutes for children to calm down. Lights were asked to be turned off by the children which created more of a stormy ocean atmosphere that we considered to be little scary for children and asked many times to turn the lights on, but children did not want to.

The voice guidance of the session consisted of suggestions to focus on listening to the waves, feeling how a fresh wind is blowing, how the boat is moving and imagining different fishes swimming around the boat. We thought that two of children fell asleep while one was singing peacefully. After 10 minutes of children's resting, we encouraged them to open their eyes and start to move slowly.

We finished the session with the active play, by imagining that we have arrived to a shore and are swimming in the fresh ocean. We guided them to pay attention to cool water, smooth rocks, watching fishes and creating water splashes.

We asked children how did they like the session and what do they want to do the next time we meet: "I really liked to swim in the water", "I want to play more.", "When are we playing this next time?".

## 7.3 Animals in the rainy jungle

We aimed to be sensitive towards children's wishes related to the planning of activities. Since children seemed to enjoy both themes of our two first sessions: which were related to swimming and nature, we decided to combine those themes in one for the third session, which aimed to help children to experience calmness and positive emotions.

Third session was on the 11th of March and there were 4 participants. We started the session by opening a discussion about different animals living in a jungle. Then we



started to listen to the sound of a rainy jungle. We wanted to keep the lights on for a video recording, but since children asked if we could turn all the lights, we were not able to make a video recording of the session. The session was evaluated solely by our active observation. In the beginning it was challenging to maintain attention. One of us started the planned guided session, but it was interrupted several times by restless behavior. Only when we started to tap rain with our fingers to their foreheads children calmed down. It turned out to be a very effective way to make children relax and concentrate. When tapping carefully on their faces, hands and legs we asked them to imagine rain and different animals and insects walking through their hands and body. We also asked them to suggest what jungle animals are walking on them. We continued this imagination play until they all relaxed and one of them almost fall asleep. We did not expect that children would be able to concentrate for long, but were surprised when the session lasted more than 15 minutes.

When we saw that the children started to move a little and decided that it is enough, we turned on the sound of a sea and continued with an active play. We told the children that now we are swimming in a warm jungle river. Children seemed to enjoy both: relaxing and active play very much. Feedback was very positive.

#### 7.4 The crow

We wanted to dedicate the last two sessions to self-regulation skills and evoking empathy. The fourth session was conducted on the 24th of March 2016. There was 4 participants: two 4- year olds and two 5- year olds. We brought 10 different cards with a picture of a crow. On each card, the crow was expressing a different emotion. On some pictures it was friendly, generous, happy, fair, and full of ideas and on others sad, angry, rude, busy and stingy. We asked each child to choose one card. After that, one by one, we discussed about the cards that children have chosen. We asked what child is seeing in the card and why that card was chosen. Three out of four participants chose a card with a positive image and only one chose a card where the crow was angry.

One girl explained her choice with her personal experience of anger that she had in the morning, she was kicking objects, because she did not get an Easter candies. We reassured the girl that experiencing anger is normal and encouraged her to tell more about the emotions she experiences. Then we asked children to imagine how it would feel if someone would behave towards them in the same way. Children agreed that it would not be nice and such a behavior should be avoided because it is harming others. We



asked the children to come up with solutions for better, alternative way of behavior in the situation. There were many suggestions from children such as asking apologies from mother and not kicking anymore.

We discussed about each card in a similar way. Cards arose vivid discussion and many ideas of their own behavior and emotions. In our view the children were amazingly good at recognizing different emotions from the cards and connecting them to their own life experiences. They also had very good ideas of what are better ways of acting. We guided discussions towards acknowledging both: own emotions and emotions of other people. All of the participants seemed to able to express empathy.

When discussing about cards where the crow was expressing positive emotions, we underlined all the positive effects that stem from happy emotions and nice behavior towards others. For example we talked about how fun it is to play with friendly and happy people. We also practiced giving compliments to each other, that resulted with smiles and giggling.

We planned the session to end with Metta meditation, with help of happy, relaxing music. Children were sitting on their pillows with eyes closed and where guided to imagine sending friendly wishes to one person. However after the lively discussions about emotions and laughter, we did not manage concentrate on the imaginary exercise, instead each of us, in his turn sent friendly wishes out loud.

#### 7.5 Friendship with a bear

The fifth session was conducted on the 26th of March. There were present all five participants: two 4-year olds and three 5-year olds. We used forest sounds in the background, sat down on matrasses and started our session with a story, which aimed to evoke empathy and understanding of the consequences of positive and negative behavior on friendship.

"The story is about a cranky bear, a polecat and two rabbits who were afraid of bears. One day the rabbits ran into the bear during their lunch in a strawberry valley. Bear was very furious, it yelled and attempted to attack the rabbits, but the pole cat defended the rabbits by telling the bear that it is inappropriate to scare others, if you do that you will never have friends". The bear started to cry and said that he is hungry and does have



no friends, because he does not know how to make new friends. The polecat reminded that being mean does not feel nice to others and that it is not the right way to make friends. The polecat continued: "you can behave nicely instead and make friends". The rabbits and the polecat asked the bear to join them and become their friend. They taught him how to behave friendly so that they could play together in the forest. Animals told the bear that they help each other, share their food, toys and always want to make each other happy."

After the story we opened a discussion about it. We asked them whether they thought this bear acted in a friendly way in the beginning of the story and would it be appropriate if someone would act in the same way. Children all agreed that it would not be ok to yell at anyone, and few of them admitted that they yell at someone at times. We asked the reasons behind the yelling and discussed about how others should be treated. Children were very interested and had many examples about good behavior and bad behavior. They all agreed that it is much nicer to play without conflicts.

Our meeting was finished with a short Metta meditation, that included peaceful music and resting on matrasses. It was the first time when the Metta exercises went fluently. Children attempted to send their friendly wishes to someone in their thoughts.

## 8 Evaluation methods and results

## 9.1.1 Observation

Previous experiences working as a kindergarten teachers before gave us the basic skills for observation. Observing children during the sessions enriched the planning for upcoming sessions.

According to active observation during the sessions we found that inspiring attitude and genuine devotion to the activity of an educator plays a key role in children's interest and motivation during the activity. Based on active observation during the sessions, we succeeded to create an inspiring atmosphere on each session by make use of gestures, mimics and attitude that helped to draw and maintain children's motivation and interest.



## 9.1.2 Video recording

Each mindfulness session held in kindergarten was recorded on video camera to support the personal evaluation process for the thesis. The recordings were watched by us only and supported our personal learning, remembering of the events and the planning of the following sessions. Observing the video recordings afterwards helped us to renew the viewpoint of the quality of the sessions, by detecting weaknesses and strengths of chosen exercises and teaching approaches.

#### 10 Feedback

Feedback on our thesis project is based on discussions with personnel of the labor market partner, the participant children and their parents. The informal interviews and discussions took place in the kindergarten before and after conduction of sessions. We have prepared the questions before hand in order to support receiving of valuable information for the thesis project.

#### 10.1 Feedback from children

In our view the feedback from children was the most valuable part of evaluation of how we have succeeded to conduct the sessions. Informal feedback from children was received on each session which was supported by our active observation and video recording, which allowed us to concentrate on conduction of the sessions. Watching the sessions afterwards helped us to remember the sessions, evaluate our attainments as professionals and view children's opinions. In addition to what children had said, we paid attention to body language of the children when observing the video material. For the most part the sessions went fluently: the children were always exited to join the activity, seemed pleased and never wanted to finish the sessions. At times maintaining the attention of some children was challenging, but we always managed to bring it back. Verbal feedback from children has been positive:

"We don't want to leave yet."

"When are you coming back next time?"

"Can we do the same things again?"

"I like swimming."



"I want to listen to the birds all the time."

"This is too fun."

"I want to be nice to my friends."

"You can all play with my bear if you want."

We managed to evoke many positive emotions in the participant children and create a calm and pleasant atmosphere, which is a prerequisite for healthy growth environment with lowered risk for experiencing negative stress.

#### 10.2 Feedback from kindergarten teacher

Kindergarten teacher was pleased about our thesis project and was co-operative during the whole process. She was open towards our ideas of stress reduction in day care environment and was very interested in our concrete ideas on how to create more peaceful atmosphere in day care. She welcomed us to continue similar projects again and said that our cooperation was a positive experience, both for her and children. She said that they have different activities in the kindergarten, but most commonly they are active such as music and dancing. They have not applied exercises that are aiming for calming down earlier, hereby she found them highly valuable.

#### 10.3 Evaluation from parents

Grateful and cooperative parents allowed open interaction during the project, which opened a new conversation subject between parents and personnel of the labor market partner. Our thesis project arose discussion about different stress factors and ways for stress reduction. During our discussions with the parents, they received knowledge about applying mindfulness and self-regulation based exercises as stress reduction methods. We raised their awareness of the benefits of good self-regulation skills and mindfulness. Our informal discussions with parents were guided by the following questions.

- 1. Do you know have your child liked the sessions that we conducted?
- 2. Does your child feel often restless or tired after days in a kindergarten? If yes, what are the reasons for that?
- 3. Do you use any relaxation methods during leisure time?



4. Do you have any thoughts considering the conducted sessions? Do you support the idea that kindergarten workers would continue to use similar exercises?

#### 10.4 Personal evaluation and critical view

Creation process of this thesis project was interesting and teaching experience for both of us, for realization of which, we demonstrated work in creative, cooperative and flexible manner. Our motivation was consolidated by our personal interest towards the chosen subject for the thesis and consideration of its significance.

This thesis project contains some features of a research, but is not a proper study. The group of participants in sessions and those who gave feedback was small, therefore results are not qualified for generalization. There were five children with an unknown background who took part in the sessions, who were chosen to participate in the sessions merely for their age. Long term effects of the exercises that this thesis is introducing are not studied and repeatability of same results with other similar sized groups and same aged children is uncertain.

Quality of the exercises is strongly dependent of the person who is guiding the exercises. There are many factors that effect on quality and results of the exercises related to both: participant children and the person who is guiding the relaxation sessions. Tone of voice, a manner how words and sentences are pronounced and rate of the speech of the guide can play a major role. I addition guide's relationship with children is significant, for example whether he or she is their teacher or a person who they do not know well. Safe relationships work as a foundation for good learning and optimistic attitude towards receiving a new information. Secondly young participants are often challenged when they are suggested to be settled down as in our exercises. Ability to calm down varies dramatically between different children depending of a relationship with an adult and differences in their personalities and temperament.

Feedback from more people could have been useful for the versatility of the results. Evaluation of the sessions was based on feedback received through informal discussions with children who participated, their parents and one professional of the kindergarten, who was observing the sessions. Having more observers during the sessions could have brought a deeper understanding and new aspects of our performance, however it was not possible, due to the lack of resources of the labor market partner.

In our view, successful mindfulness based activity and learning self-regulation skills require much time for practicing and a strong will to concentrate which is a challenge for



small children. Five sessions are not usually enough to learn mindfulness and self-regulation skills, however based on our observation during the sessions, each of the participants had many moments when they appeared relaxed and enjoying the activity. It is nearly impossible to measure how much of conscious presence, calmness or joy they have experienced during the sessions, but the outcomes of the active observation during the sessions, feedback from children, their parents and personnel of the labor market partner indicate on correspondence between the aims and results for the thesis.

#### 11 Conclusions

We aimed to offer the participant children a chance to experience an activity that we personally find as an excellent way to experience inner peace and positive emotions, for many children who attend day care spend most of their daytime in a busy and hectic environment on weekdays. Due to various factors, such environment often generates negative stress-related effects in children. These factors for example are: large number of children in child day care groups, noise, and lack of workers and settling of a child to a new environment. In addition, poor information flow between personnel, unsuitable premises and circumstances with a predisposition to be infected, due to the great number of daily social contacts in child day care, are often creating unfavorable conditions for child's learning in a child day care.

When professionals of early childhood education anticipate situations in child day care and build a common structure, restlessness can be reduced. Daily, flexible and clear work division, that requires good interaction between workers, is crucial for stress management in child day care environment. Another effective way for calming a hectic atmosphere in day care is by dividing a large group to smaller parts. In our view there is a great need for paying more attention to these challenges and that they can be sonly though a successful, cross disciplinary cooperation those they can be solved.

As future professionals of early childhood education, we underline the responsibility of care givers for the strengthening of children's emotional well-being and importance of activities, that can help in reducing negative stress by teaching children how to calm down, learn how to control own behavior and guide thoughts on positive images. Teaching emotional and behavioral management for children can carry a major role for bal-



anced growth and development. Self-regulation skills mean the ability to control and adjust own behavior to the social environment, in other words it is a stem for good social skills and healthy relationships.

Mindfulness is a practice that can support human's ability to be more alert and aware of himself and environment that is surrounding him in a present moment. Applying mindfulness practice can be applied as an effective tool for reducing negative effects of stress through developing child's concentration skills, self- awareness and reinforcement of deep relaxation. Mindfulness can be added in daily lives through simple ways. In child day care mindfulness could for example be practiced during a morning circle or before and during resting time.

Aims for this thesis were met and collaboration with the labor market partner kindergarten went successfully. We were able to create and evaluate the set of exercises that can be used for evoking calmness and positive emotions in children. Professionals of the kindergarten were introduced to the new activity which carries a potential to reduce stress levels of children. According to the discussions with the labor market partner, the model for exercises will be utilized. A kindergarten teacher from the labor market partner, who is also the director of several units of the private kindergarten chain, participated on each of the conducted sessions as an observer. Instructions on how to conduct the exercises were supported by her notes that we read through and corrected together, in order to create a clear guide on how to conduct similar exercises in future. According to the kindergarten teacher, exercises will be added in the weekly program of the kindergarten and the idea will be introduced to the other child day care units of the labor market partner.

The whole creation process of this functional thesis was an enriching learning experience, which deepened our understanding of involvement in creative social pedagogical activity with children, developed our cooperation skills with labor market and reinforced our professional identity as a future Bachelors of Social Services. We are hoping that this thesis will bring more visibility for the existence of children's negative stress in child day care and that the personnel of the labor market partner will benefit from the exercises permanently and can find them as an effective tool for evoking calmness and positive feelings in children.



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Appendix1.



Dear parents!

We are students of Helsinki Metropolia University of Applied Sciences. Our future profession is a Bachelor of Social Services. At the current moment we are working on our thesis project, which includes conducting five short sessions based on Mindfulness practice and self-regulation skills for children aged 4-6. The sessions are taking place in February and March 2016.

The purpose of the sessions is to teach children a simple way to rest, calm down and learn how to focus on positive images through fun exercises. With your permission and will of your child can take part in these exercises.

The sessions will be video recorded. Video material is going to be used only by us, in order to support the evaluation process of the thesis project. By the end of this project, the video material will be destroyed.

There will be no any children's names mentioned in the thesis, nor any other identification data, except children's age and gender. The thesis will be published on website theseus.fi.

With friendly regards,

Elena Wahlsten & Nella Kytönummi Helsinki Metropolia University of Applied Sciences/ Degree Programme in Social Services

