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## Smiles for the Future

# Oral Health Promotion with Creativity-Based Approaches for Preschool Children

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#### **Abstract**

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This master's thesis aimed at facilitating possibilities for meaningful moments towards healthier choices for oral health. Data construction was conducted through a creativity-based workshops for oral health promotion for preschool children. The data was constructed through video recordings and supported by artwork made by the participants. The research question was: What does creativity-based oral health promotion bring out in preschool children?

Excitement was experienced through playful approaches, and the combination of something new, something familiar, and something personal got the participants engaging with the subject and activities. Creating a kind atmosphere was important to embrace a pleasant experience regarding oral health promotion, and on the ethical side, to make sure the children were comfortable and enjoyed the activities.

Facilitating workshops for possibilities of meaningful moments happened through open sharing, receptive listening, experiencing through multiple senses, encouraging support, and common respect. Oral health as a topic enabled active communication, as it was familiar and personal for all. Artworks made by the participants through creativity-based approaches reflected the groups discussions, and led conversations further as the children were eager to share their work and see what the others had come up with. The children were comfortable enough to share personal experiences, request further guiding, and question what was said. These conversations reveal reflecting that can lead to deeper thinking, and even meaningful learning.

The preschool children had a great sense of community, where they could rely on each other and share openly. Creativity-based activities created a safer environment for the facilitator and the preschool children to engage to this process and experience together. As the children's thoughts and experiences might have differed, the conversations remained respectful and thoughtful - the conversations were constructive.

Oral health promotion is needed for long as there is a risk for oral health. Even a minor thing can have an impact and provide a chance for a better wellbeing in their future.

Keywords: Creativity, Multidisciplinary, Oral Health Promotion, Playfulness, Preschool Children.

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Tämän opinnäytetyön tavoitteena oli mahdollistaa suun terveyden kannalta merkityksellisiä hetkiä kohti terveellisempiä valintoja. Aineisto kerättiin esikouluikäisille tarkoitettujen työpajojen kautta, jossa suun terveyttä käsiteltiin luovien menetelmien kautta. Aineisto koottiin videotallenteiden avulla ja sitä tuettiin osallistujien tekemillä taideteoksilla. Tutkimuskysymykseni oli: Mitä luovuuteen perustuva suun terveyden edistäminen tuo esiin esikouluikäisistä lapsista?

Leikkisät lähestymistavat saivat lapset innostumaan. Yhdistelemällä jotain tuttua, uutta ja henkilökohtaista, aktiviteetit saivat osallistujat sitoutumaan toimintaan. Ystävällisen ilmapiirin luominen oli tärkeää, jotta saataisiin miellyttävä kokemus suun terveyden edistämisestä, mutta myös eettisessä mielessä haluttiin varmistaa, että lapset voivat hyvin ja viihtyisivät toiminnan parissa.

Työpajat pyrkivät mahdollistamaan merkityksellisiä hetkiä luomalla avoimia sekä vastaanottavaisia keskusteluja, kannustamalla, sekä moniaististen kokemusten ja yleisen kunnioituksen kautta. Suun terveys oli aiheena kaikille tuttu ja henkilökohtaisine kokemuksineen se mahdollisti aktiiviset keskustelut. Luovilla menetelmillä toteutetut osallistujien taideteokset kuvastivat ryhmien keskusteluja ja veivät keskusteluja eteenpäin, kun lapset halusivat jakaa töitään toistensa kanssa, sekä nähdä mitä muut olivat tehneet. Lapset jakoivat mielellään omia kokemuksiaan, pyysivät lisää ohjeistusta ja kyseenalaistivat kuulemaansa. Nämä ovat merkkejä reflektoinnista, joka voi johtaa syvempään pohdiskeluun, tai jopa merkitykselliseen oppimiseen.

Esikoululaiset luottivat toisiinsa ja jakoivat avoimesti kokemuksiaan, mikä viesti vahvasta yhteisöllisyydestä. Luovuuteen perustuva toiminta loi ohjaajalle ja esikoululaisille turvallisemman ympäristön osallistua tähän prosessiin ja kokea yhdessä. Keskustelut olivat rakentavia, sillä vaikka lasten ajatukset ja kokemukset saattoivat poiketa toisistaan, keskustelu säilyi kunnioittavana ja mietteliäänä.

Suun terveyden edistämistä tarvitaan niin kauan kuin suun terveydelle on olemassa riski. Pienikin asia voi vaikuttaa ja tarjota mahdollisuuden parempaan hyvinvointiin tulevaisuudessa.

Avainsanat: esikoululaiset, leikillisyys, luovuus, monitieteellinen, suun terveyden edistäminen.

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## 1 Introduction

A warm smile is the universal language for kindness. – William Arthur Ward

As a dental care professional, I am constantly reminded, how we need our teeth to eat, to talk and to smile – oral health is directly connected to our general health, social life, and overall wellbeing. I have noticed the connection of oral health to overall wellbeing being present in guidelines, research, and even marketing. Finland's Current Care Guidelines (Käypä hoito -suositukset) are independent, evidence-based clinical practice guidelines, and the guideline for dental caries (Karies [hallinta] 2023) clearly states, that "Taking care of oral hygiene and oral health is part of taking care of general health." This message is not only for dental care professionals, or for those with poor oral hygiene, or a higher risk of oral disease, but for all people. As a conclusion from Berg (2016: 11), "all who have an interest in health should therefore have an interest in oral health."

Accordingly, 21–36% of Finnish children are afraid of oral health care (Sirviö 2019). Fear is a natural reaction, and in dental care it may involve pain, lack of control, or even shame about the condition of oral hygiene (Pohjola 2021). Dental care professionals have ways to reduce pain and ability to enhance the patient's sense of control by listening and including the patient through communication. In oral health care, the purpose is to encourage patients to practice good oral hygiene, not to judge anyone. Negative experiences, as well as stories, and nightmares from acquaintances and the media, can cause dental fear. Many people going to the oral health care are nervous, but for some the fear can lead to avoiding oral health care for as long as they can. Neglecting oral health leads to increased risk of oral diseases and that can affect general health and cause psychological and social consequences in the future. Therefore, sending a positive message about dental care can be significant in a person's life. (Pohjola 2021; Sirviö 2019.)

As a dental hygienist, it is my obligation to improve the ability of the population to take care of their oral hygiene and increase the knowledge of oral health. Health promotion and preventive care to improve oral health of the population are an essential part of dental hygienist's profession. The goal is to give good patient care along with promoting oral health. (Suomen Suuhygienistiliitto SSHL ry 2020.) With this master's thesis I see an opportunity to educate, motivate, and promote oral health – to leave a positive impact on the society.

Patricia Leavy (2020: 28) states that "research should be useful, which in turn is a part of social justice work." I wanted to create something useful, and the core of this thesis was to provide pleasant experiences of oral health promotion through creative workshops. I aimed to create a pedagogically thoughtful experience, that would support the preschool children's oral health, motivate towards better choices for healthier mouth, and for children to have a positive relationship with oral health care already from the early age. The Finnish Children's Protection Act (Lastensuojelulaki 2007/417) states, that "The child's parents and other guardians have primary responsibility for the child's wellbeing... The authorities must support parents and guardians in their educational task and strive to offer the family the necessary help early enough." It was important for me to include the parents, the guardians, through letters before and after the workshop to get them as engaged as I could with this topic of oral health. The cooperation with the kindergarten provided possibilities to share the importance of oral health to the educators of the children as well, so the educators of the participants were all present at a workshop. I am set to find out what this creativity-based workshop of oral health brings out in the participants, while conveying a kind and caring message from dental care.

It is obvious that oral health must be taken good care of throughout lifetime, and it needs to start at the very beginning. I chose preschool children as my participant group, because they are at a crucial stage when it comes to the oral health. The preschool children are getting more independent, when taking care of their oral hygiene, but there will also be challenges due to changes happening

in children's mouths. The permanent teeth are starting to erupt, and so this is an important time to be aware of oral hygiene. (Suomen Hammaslääkäriliitto 2022.)

I wanted to do creativity- and arts-based research from the very beginning of this thesis project, and it was important for me to emphasise empathy and positive feelings towards dental care. According to Corbin et al. (2021: 7), "many arts-based approaches offer alternative ways to present knowledge and information." Creative or arts-related activities allow people to communicate without knowing how to read or write, and there is no right or wrong when the goal is to express oneself (Leavy 2017: 207-209). I believe that creativity and arts have the potential to support a gentle approach on dental care. In my work, I have experienced how music can calm a nervous client, and I use pictures or model teeth to clarify self-care instructions. There are two-minute-long songs for children that motivate them, for the two minutes necessary, to brush the teeth, and toothbrushes that change colour when it is time to change them in to a new one. As said, creativity is already making dental care more approachable and pleasant, and I wish to do my part in advancing this trend.

As I produced a workshop for preschool children, I created something new for myself and for the participants. Creating something new has a certain excitement to doing, and as an experience it might even support a participant's personal growth (D'Amato & Krasny 2011: 245). Carl Rogers (1902–1987) sees creativity as everyone's right and as part of personal growth. The prerequisites are openness, reflecting personal experiences, and the ability to play (Uusikylä 2012: 43–45). These are the key features on how I wished to process in this thesis project, to get the most out of it for my professional development as a dental hygienist as well. By writing and presenting my thesis in an open, reflective, and playful way (cf. Uusikylä 2012: 43–45), I seek to provide opportunities for the reader to learn while reading.

#### 1.1 Overview of the Thesis

In Chapter 2 I will go deeper into the world of oral health promotion (Karies [hallinta]. Käypä hoito -suositus 2023; Parodontiitti. Käypä hoito -suositus 2019), unravel the power of creativity and playfulness (e.g., Tonkin & Whitaker 2019; Uusikylä, 2012), look for creativity in dental care (O'Grady 2022; Bradt & Teague 2016), and ponder these issues from a perspective of preschool children (e.g., Kronqvist 2020). This chapter builds the conceptual framework for the thesis and aims at giving a comprehensive overview of the subject. Preschool children's oral health consists of many things like taking care of oral hygiene, making healthy choices regarding nutrition, and creating an environment that supports a healthy mouth. Playfulness can encourage people to discover, it can make learning more effective and fun (Brown 2008). In this master's thesis, creativity reflects my goal to create something meaningful, something useful and something concrete. The last subchapter of the second chapter gives examples of creativity in dental care, and ties together the concepts with multidisciplinary and multi-professional cooperation.

In Chapter 3 I am building the basis of this research, and defining what I am researching and how. In this chapter I present the methodological starting points along with data construction and analysis methods. As the implementation of data construction is through creativity-based workshops, this chapter will have a closer look at the activities and assignments planned for the preschool children who participated in the study. In this chapter, I will also discuss the ethical guidelines and choices that influenced this thesis project.

In Chapter 4 I will present the findings based on data analysis. This chapter will answer the research question and share the meaningful moments of the participating preschool children and me, that the data analysis brought up. This is about what oral health promotion through creativity-based approaches brought up in preschool children.

In Chapter 5 I will draw the conclusions based on the study's findings and discuss the notions it brought up. In this chapter I will present the thoughts and ideas that the thesis project aroused in me. This chapter will also present my reflections for further research and my review of the trustworthiness of the research.

## 2 Conceptual Framework

In this chapter I will introduce pertaining scholarship and conceptual framework of this research, focused on oral health promotion, and possibilities of play and creativity for dental care and for preschool children. The goal is to draw focus points, that will guide the thesis process, and the conceptual framework for the data analysis.

### 2.1 Oral Health Promotion

Oral diseases are a major problem around the world. As Isola (2020: 2) states, "Data from 2017 confirm that untreated caries in permanent teeth remain the most common disease worldwide, affecting 34.1% of the population." Brushing teeth and cleaning between the teeth is essential for good oral hygiene, and according to research brushing twice a day lowers the risk of getting gum and supporting tissue diseases (Heikka 2022a). While working in oral health care, I encounter situations where patients are aware of oral hygiene recommendations but fail to follow them. Even though oral diseases are a significant problem in themselves, the mouth is the gateway to the body, as the teeth are the only point where hard tissue goes from the inside to the outside of the body. Through the mouth, bacteria can enter the bloodstream or through the digestive tract to other parts of the body. (Hippi 2023.) The importance of conducting regular oral hygiene habits cannot be denied – yet they might not be followed by even the ones that acknowledge them. Preventive oral health promotion is needed.

Suominen (2021) tells, "good oral health in childhood is connected not only to good oral health in adulthood, but also to quality of life and general wellbeing throughout life", therefore oral health plays a significant role in everyone's life. As Anttonen et al. (2020: 33) says, "caries with all its consequences can worsen a child's oral health-related quality of life by affecting sleeping, playing, eating and self-esteem." Oral diseases can cause or worsen general diseases, for example diabetes and cardiovascular diseases (Heikka 2022d). Bacteria, smoking, unhealthy diet or lifestyle are risks for oral diseases along with other chronic

degenerative diseases. Therefore, preventive health care should be considered in a wider measure for people. (Isola 2020: 3.) Like Hippi (2023) says, "there are many things we cannot do anything about, but we can take care of oral health."

The need for dental care is often connected to other problems. Problems related to dental care, as well as other social or health care related issues, should be addressed as they may lead to more problems. (Nissinen 2019.) Studies have shown that families with low income and educational level are related to the presence of children's caries (Cianetti et al. 2017). Since daycare educational activities target all children, regardless of their socio-economic background, it is recommended that the activities also teach habits that promote oral health (Karies [hallinta]. Käypä hoito -suositus 2023). Leaning to this, the basic understanding of good oral health care should be promoted to other social and health care professionals to support their knowledge and skills. A thesis collaboration with a municipal kindergarten was a conscious choice for me. To maintain good oral health in the society and to make sure everybody has a chance for good oral hygiene, children need a network of people to support and guide them towards healthy choices through their childhood, and that requires multi-professional cooperation (Nissinen 2019).

Health care professionals, school and other activities have responsibilities for supporting and adopting healthy lifestyles, but guardians are responsible for their children. Daily routines of oral hygiene should become established already in childhood. (Suominen 2021.) This thesis is implemented in a municipal kindergarten, and the guardians are included through written messages before and after the workshop. Cooperation with different parties, and especially with the children's families, is important for oral health, and it is an important part of this thesis – even though this is more of an ethical side, rather than the actual goal of this research. Everyone who takes care of children should have knowledge about dental care for children. Care paths should be known so that, if necessary, a child could be directed to the right place. In dental care, every child is an individual and for treatment to meet the child's needs, cooperation with other healthcare professionals is needed. (Anttonen et al 2020: 35.)

People that have experienced mental health disorder have a high risk for worse oral health. There may be poor lifestyles and diet, or they may not even be able to take care of their oral hygiene. Medication for mental health disorders may increase plaque formation and cause dry mouth, that increases the risk for oral diseases even more. (Slack-Smith et al. 2017: 7.) Fear can be associated with mental illnesses, but many people experience dental fear, who do not have a mental illness. Sometimes the fear can make seeking treatment impossible. In dental care the aim is to build trust gradually, if necessary, premedication can also be used. (Honkala 2022.)

It is important to make sure that children and young people attend regular oral health checks-ups (Karies [hallinta]. Käypä hoito -suositus 2023). Dental anxiety is a significant challenge for dental services, and a more positive insight could support the participation of regular dental check-ups (Marshman & Campbell 2017). I believe, a positive attitude towards oral health care in general would motivate people to learn and take better care of their oral hygiene. Like Boyd et al. (2020: 407) reminds, "Clinicians need to remember the patient is the decision maker."

Habits that support children's oral health, along with regular check-ups, are brushing teeth with fluoride toothpaste twice a day, and regular mealtimes with a healthy diet. A healthy diet for healthy teeth means avoiding frequent consumption of products containing sugar and causing tooth erosion, especially sugary and acidic products, using water as a thirst quencher, and using xylitol products after meals. (Suominen 2021.) When a healthy lifestyle and habits are learned and followed already in childhood, it provides the best base for controlling the caries bacteria in the future (Kilpeläinen et al. 2013: 24).

Even though oral diseases are largely preventable, they are one of the most common type of diseases worldwide (Etchells & Tonkin 2019: 107.), and that is also why people need to take this matter of oral health more seriously. Caries can be controlled with healthy lifestyles and with good oral hygiene throughout life. (Karies [hallinta]. Käypä hoito -suositus 2023). The prevention of inflammation of

the gums is essential to prevent periodontitis, a gum disease (Parodontiitti. Käypä hoito -suositus 2019). As Berg (2016: 1) says, "There is nothing more important in dentistry than early intervention." With appropriate and suitable oral health promotion, dental care professionals can guide people's choices towards the ones that support a healthy mouth, and a healthier society.

Although the oral health of children and youth has improved in Finland, tooth decay is still rather common (Suominen 2021). According to Finland's current care recommendation on caries treatments, Finnish teeth cleaning habits are still quite poor, although in the 2000s the portion of people brushing their teeth at least twice a day has increased. The brushing recommendation is implemented in less than half of young children, for example 41% of five-year-olds brush as recommended. (Mäki 2010: 106–109.) The statistics state the need for improvement in oral health. A more stable day-to-day routine could have a significant impact on brushing habits (Trubey, Moore & Chestnutt 2015: 162). According to research, that showed caries prevalence in 5-year-olds to be more common when teeth were brushed less than twice a day or there were difficulties during brushing, suggests health professionals to offer empowerment and precise guiding for parents on brushing behaviour (Boustedt et al. 2020: 158).

When it comes to brushing the teeth, it is not only the habit of brushing twice a day that needs to be followed. According to research of adult population, it can be said there is a deficiency in the technique of brushing teeth, as there were visible plaque present in 40–70% of those who reported brushing their teeth twice a day (Suominen-Taipale et al. 2004). Visible plaque is associated with incipient caries lesions (Laajala et al. 2019). This proves that there is a need for guidance in the teeth brushing technique to make sure it is efficient, even for adults.

The first permanent teeth usually start to appear at the age of five to six, that is also the time children in Finland usually start their preschool. It is important to make sure there is no plaque after brushing the teeth, to keep the erupting permanent teeth healthy. Preschool children are at the age when they start to have developed motor skills to such level that they are capable of clean their teeth

more independently. Although, parents should still make sure the teeth get properly cleaned until the age of eight to twelve. (Suomen Hammaslääkäriliitto 2022; Karies [hallinta]. Käypä hoito -suositus 2023.)

The eruption of permanent teeth means more care and changes for taking care of oral hygiene. The chewing surfaces of erupting or recently erupted molars should be cleaned especially carefully. This is due to the maturation of the enamel and the difficulty of cleaning the erupting teeth, that the risk of cavities in the molars increases. (Karies [hallinta]. Käypä hoito -suositus 2023) The changes to permanent teeth will bring change to the toothpaste that should be used, as the amount of fluoride, that is needed, rises (Suomen Hammaslääkäriliitto 2022).

During the school year of 2009 and 2010 the health authorities of five municipalities in Central Finland tried to promote oral health of primary school children. The research showed improvement in all participating municipalities, regardless of the implementations and methods they used. According to this research, even a minor intervention can affect children's health behaviour. (Kilpeläinen et al. 2013: 29.) These experiences of affective oral health promotion motivate me to share the knowledge of oral health in a hope to make a difference for better.

In the 1970's and 1980's, there was a great contribution to the promotion of oral health for children and youth in Finland, and the amount of tooth decay dropped significantly. These days the decline in tooth decay has levelled off or may have even turned to an increase. Oral health promotion is important as ever, as it can prevent oral diseases and support healthy mouths. Snacking and increased use of sugary foods are a risk to oral health, as well as the inadequate oral hygiene. (Kilpeläinen et al. 2013: 24, 28–29.) Oral health has risks, but also ways to overcome them. There is a need for oral health promotion as long as there is a risk for oral health.

## 2.2 Creativity and Playfulness for Meaningful Moments

I emphasise positivity and fun as something pleasant - as something that leaves a person feeling good. Sending a positive message can be many things, but the aim is to avoid causing stress, fear, anxiety, or any kind of harm to anyone. According to Clark (2020) "when we are subjected to a negative stereotype, we tend to conform to it", so I choose to embrace everyone's potential and focus on the positive. Fun is something that provides an escape from the pressures and expectations of the responsibilities. Fun experiences are genuine, joyful, insightful, and comfortable. I have experienced creativity and playfulness to bring positivity and fun, so it felt natural to learn more about these topics and utilize them in this thesis process. According to Morney (2022: 4) a playful atmosphere, without requirements of productivity or result, can support ideas to emerge, and as various ideas start to emerge, considering multiple ideas may improve creativity – creating possibilities for meaningful moments.

It is important that the oral health promotion leaves a positive message, as Boyd et al. (2020: 407) remind, "control and management of oral health conditions are dependent upon the self-care and compliance of the patient." I read about research that brought out the lack of developing problem-solving skills at schools, where the focus seems to be in applying the rules formulas or predefined schemes. To quote Fornasiero, Malucelli, and Sateriale (2022: 81), "learning by heart instead of reasoning" may reduce students' creativity and interest. This brings up an important point also in oral health promotion, that the aim is not just to make sure the patients *know* about oral health, but to make sure they *understand* about oral health, in order to act accordingly.

Helenius and Korhonen (2020) say, that "play is an activity that is practical. Everyone can understand play." Play is for all, and that way it is a great fit for group activities. And when it comes to creativity, Uusikylä (2012: 57–59) states, that "creativity can be art, science or even a way of thinking." Combining oral health promotion and creativity-based approaches can already be seen as something creative, but when doing it for children, creativity becomes almost

inevitable. According to Pääjoki (2020) "children are creative by nature, they examine the world with curiosity, use their senses and make functional solutions based on them." Children can learn through curiosity and play that can lead to creativity.

Creativity has many definitions and as they may differ, it highlights how broad and detail the discussions and elaborations has been taken place in different contexts. I stick to a comprehensive definition by Jamali (2022: 63), that "creativity denotes producing something novel and useful." Creativity can be anything from big and bold to small and plain. It can be as simple as placing a waste basket in a more innovative, aesthetic, or efficient way. Regarding rhetorics of the creativity Banaji (2017: 18) poses questions and ponders "Does creativity reside in everyday aspects of human life or is it something special?... the issue of whether there is, in fact, any difference between 'good' and 'creative' pedagogy is the focus of attention in a number of the rhetorics." Everyday creativity that brings something special is valued in this process, but instead of focusing on the quality, creativity in this master's thesis process focuses on meanings and meaning making.

According to Banaji (2017: 17), "creativity is something constructed through discourse", as there are many different functions and purposes for it. In this thesis creativity is not seen as something, where the creativity is "a special quality of a few highly educated and disciplined individuals", and it is not categorised to 'high' and 'common'. The creativity in this thesis is more about meaning making and applying flexibility to have an impact on our lives. (Banaji 2017: 18–20.) Even though the creative approaches in this thesis pursue pedagogical development in the participants, everybody is free to participate in their own way, or decide not to participate at all. The participation in this thesis is based on voluntary, but this is also because people learn, progress, and make use of creativity in their own way (Banaji 2017: 22). Creative learning has a purpose, and it can be enhancing and encouraging within the bounds of resources. It is holistic in a way it is sensitive, interactive, open for variables, and curious for consequences. (Banaji 2017: 24–25)

Dale's Cone of Experience marks the most efficient way of learning as learning by doing – "powerful learning environments should be full or memorable and rich experiences that allow students to hear, see, taste, touch and try" (Lee & Reeves 2018). Also, according to Leavy (2020: 12), "In order to make a deep impression, people must be engaged in their learning process." The process of making art is multi-sensory, and the experience itself can be more important than the end result (Pääjoki 2020). With that in mind, I have designed my workshop to enhance creativity by providing playful activities through which the children can experience matters of oral health more holistically. People learn in contexts, and if the learning context is encouraging, it can arouse curiosity that deepens learning (Clark 2020).

To flourish, creativity needs a creative climate, creative attitude, and creative thinking. Creative climate is both physical and psychological. It includes an environment and resources that support creativity, and trust and collaboration to make it safe to create. Creative attitude refers to different qualities, like openness and curiosity that able creative thinking. Creative thinking requires generating useful ideas flexibly, elaborately, and originally. (Jamali 2022: 63–64.) The same themes repeat as Morney (2022: 1) suggests that "individual freedom, sufficient resources, supportive leadership, but also individual creative space and time are requisites for creativity to happen." Passion can be seen as the drive to motivate creativity, but trust and safe environment provide support for the creativity to happen (Morney 2022: 1, 4).

Whitaker and Tonkin (2019: 16) write that sharing a common language enables communication, but sharing an understanding enables commitment, and that depends on openness, mutual respect, and a shared intent. Arts create an opportunity for self-expression, but also for interaction with others (Pääjoki 2020). I think that arts have the characteristics to act as another language to create understandings and communication between me and the children. This is why I wished to use creative and arts-based approaches in my thesis. I see using creative approaches as way to make experiences more gentle, more personal, more holistic, and more allowing. As Flewitt and Ang (2020: 1) say, "Our

understanding of children and childhood must allow for this diversity and complexity of experience."

Play and playfulness have a transformational power that could bring value to approaches of health care (Whitaker & Tonkin 2019: 7, 9). The workshop for the preschool children uses playfulness to make the experience more effective, interesting, and fun. Indeed, play is fun, but it can also bring out new ideas and encourage people to discover (Brown 2008). To me, play sounds like a gentle but exciting way of bringing valuable information and skills to the participants through personal experience.

In 2008 in his TED Talk, Stuart Brown talks about play being more than just fun, and demonstrates the crowd, how "nothing lights up the brain like play." Play is natural for humans and animals. It has been acknowledged that play is a form of learning, but it can also have a therapeutic aspect to it. Even though this workshop is for children, in general, playfulness is also for adults to enjoy. (Tonkin & Whitaker 2019: 1.) With that being said, little children have creativity, but it decreases as the surroundings and society puts pressure on them to fit in to the expectations. (Uusikylä 2012: 78.) As children may be more receptive than adults, play and creativity might come as a natural way of learning for them. (Brown 2008.)

Play has a status of potential for low cost, high impact, and enjoyable way of engaging and enabling (Whitaker & Tonkin 2019: 7, 9). Dental care is expensive. It would be cost-effective to invest in prevention instead of treatment. (Suominen 2021.) Combining oral health promotion with play could be a responsible and effective way of using todays limited resources in oral health care to make an attempt for healthier society.

Workshop as a method of approach provided me flexibility and opportunities for personal and creative decisions – as a creative person dares to take sensible risks (Uusikylä 2012: 79). My profession as a dental hygienist, and this possibility for oral health promotion for preschoolers creates the pressure, that is needed

for meaningful creativity. Creativity belongs to all, it belongs to me, and to this process – creativity is concrete actions. (Cf. Uusikylä 2012: 41, 57–61.)

As creative person should tolerate uncertainty (Uusikylä 2012: 79), it is important to remember that children's creations are always creative, and it does not matter if somebody has made something just like it before. Creative process does not include requirements. Everything that surrounds us has an influence on a creative process, and innovations made by social creativity are harder to research, than the things we can see, hear, or touch. (Uusikylä 2012: 141–142.) To support learning through these processes, there should be no judging, but safety to make mistakes and encouraging to turn failures into something good (Clark 2020). So the facilitator's role in this is very important.

Abraham Maslow (1908–1970) has mentioned courage, freedom, spontaneity and self-acceptance as prerequisites for creativity (Uusikylä 2012: 41–43). This is the kind of atmosphere I would like to work with, and I will try to create an encouraging, permissive, and accepting space for the preschool children to experience creativity during the workshop. I fully believe, that as Kronqvist (2020) says, "when a child feels safe in their own group, it helps them to approach tasks, play and learning with courage, and themselves creatively."

I came across a study made in Italy that showed that children's attendance of dental services was not a protective factor against caries. This article suggested further research on the effectiveness of the current approach to dental care. (Cianetti et al. 2017.) As a dental care professional, I find this interesting, as I feel like in Finland, people rely a lot of the effectiveness on dental check-ups and clinical work. Even though I am not researching the effectiveness, I mean to emphasize creativity and playfulness as a meaningful and effective way to promote dental care and oral health.

To be meaningful, there needs to be an effect. To prevent something from happening again, people might need to learn something. To learn, people would benefit from reflecting or reviewing. Reviewing adds interaction in groups, it helps

to understand experiences, broadens perspectives, and might even provide solutions. (Greenaway & Knapp 2020: 260-262.) To be meaningful playful and creative approaches need requirements and objectives (Morney 2022: 4), and in this research the aim is at building possibilities for reflecting and reviewing, that might lead to learning and changes towards a healthier mouth.

When pursuing a meaningful outcome, facilitating a group activity, in a playful manner through creativity, a level of pedagogical skills is required. Understanding of group dynamics, practical skills of facilitating a creative approach, sensitivity, and ability to face different kinds of outcomes are emphasised the deeper the expressions and experiences goes. (Huhtinen-Hilden & Isola 2018: 12.) Pedagogical facilitation is about continuous improvement, where the facilitator supports, guides, and encourages to self-improvement, personal growth, and actualizations to bring up the capabilities of people and one's self. Facilitation seeks to create a favourable atmosphere of goodwill to accomplish the pedagogical actions as individual assistance. (Ogienko 2016: 86.) Even though I do not have a pedagogical degree, I can emphasise the personality features of pedagogical facilitation with my professional knowledge and actions in attempt to create meaningful moments.

## 2.3 Creativity in Dental Care

According to Gray-Burrows, Owen and Day (2017), "traditionally, oral health promotion has focussed on knowledge transfer, however, there is little evidence to show improvements in knowledge lead to long-term behaviour change", and I believe this is why meaningful and influential oral health promotion is needed. Creativity and playfulness offer plenty of opportunities for dental care, and various methods or approaches have been used all along. Posters on the walls, leaflets handed out to patients, and props like model teeth to demonstrate proper cleaning methods, have gained new digital forms alongside. One of such digital forms are dental care related phone apps that bring games, colouring pictures, and songs easily accessible from anyone, anywhere. (Gray-Burrows, Owen & Day 2017.) Dental anxiety is a risk for oral health, and it has been increasingly

treated through non-pharmacological anxiety management interventions, like music (Bradt & Teague 2016). These creativity-based approaches are also things that I, as a dental hygienist, enjoy at my work.

Bradt and Teague (2016) tell, "there is ample evidence that music interventions are effective in reducing anxiety in a wide variety of medical populations." The findings of the impacts of listening music to dental anxiety are inconclusive, but surrounding background music is the most commonly used anxiolytic intervention in dental care. Music therapy makes the experience personal by focusing on the patient's needs and emphasizing active participation in managing the anxiety. Music therapy interventions may focus on guided breathing, refocusing, relaxation, or imagery. (Bradt & Teague 2016.) A personalized music intervention for randomized 24 dental implant surgery patients resulted in significantly reduced burden of care, showing how the personalized music interventions may be an effective way to reduce patients' burden of care during dental implant surgery (Bertacco et al. 2022). Guidelines for dental practitioners regarding music listening with highly anxious patients include relaxing music, starting the music prior the treatment, active engagement to the music, and considering the patient's wishes on preferred music, volume control, and use of headphones or free field (Bradt & Teague 2016).

There was a project in the UK, where primary school children participated in a drama workshop aiming to identify causes of dental fear, and to develop ways to reduce the fear, that was implemented as a multidisciplinary collaboration. By using process drama techniques, the lead facilitator supported the children as they tried to find reasons for dental anxiety of a youngster, played by an actress. The children identified causes of dental anxiety and were the experts in this experience of process drama, that was intended on a greater participation from the children. (O'Grady 2022: 476–477, 482–483.) According to O'Grady (2022: 485) "process drama embraces multiple ways of knowing and does not try to erase complexity infavour of generalisability." This creative project used process drama to make the participants reflect on their thoughts through a story and become the meaning-makers of the process.

Educational videos on brushing teeth were made on the website of the University of Helsinki's Department of Dentistry, as many oral healthcare professionals wanted an implement to promote health. The videos are meant for dental care professionals as a way to promote brushing teeth the right way, but also available to anyone interested. Conversational skills play an important role when trying to influence health behaviour, but watching a video can be a pleasant way of learning for some. (Hautamäki & Tilander 2013: 11–13.) Avaa suu "Open your mouth" is a campaign of Finnish dental association, that also has videos about oral health, but in addition they reach their potential audience through social media, in Facebook and in Instagram (Suomen Hammaslääkäriliitto 2023).

As Faisal et al. (2022) says, "non-dental professionals and health workers are often well placed to support parents in adopting positive oral health behaviours for their children", this situation could clearly benefit from cooperation with dental care. As kindergartens are important communities for children, they could be ideal cooperation partners for oral health promotion for children. For the child, the kindergarten community can offer togetherness, a valuable experience, and even part of the identity. The children are roughly the same age, and they learn and explore together. The children live through kindergarten as a community and as individuals, and therefore, on some level, the kindergarten represents the strong sense of community of the old days, where people adapt to each other and to uniform ways of working. (Aro 2011: 52-53.)

In healthcare, cooperation in interdisciplinary team may ensure a holistic patient care, improve the population's health status, reduce costs, increase job satisfaction, and arouse creativity for innovative results. Interdisciplinary cooperation does not give solutions to all the problems, but it may provide skills and knowledge to address the challenges of the increasingly complex healthcare system. (Bedowska & Baun 2023: 2.) Cooperation can be fruitful and lead to creativity, but the other way around, creativity brings people together. Creativity, community, and openness have potential to create genuine connections that could create an agency to work together for the social good. (Nerantzi et al. 2021: 5, 8.) This brings the focus to the core of this master's thesis: I wish to share my

knowledge on oral health, use creativity to make it meaningful for others and playfulness to make it easily approachable, to create something for the common good.

## 3 Implementation of the Study

This chapter will focus on the aim of this research – what am I trying to find out, and how. In the first subchapter I define the research task and the questions that form the basis for methodological and methods-related choices in this research. The next subchapter is about the methodology, that defines how I will proceed with this research. The third subchapter is about data construction, and since I carry out the research through a workshop, this subchapter covers the approaches I use in the workshops to construct the data. In the fourth subchapter I will cover the process of data analysis, that was done following the guidelines of qualitative content analysis. The final subchapter is about research ethics in this study. Ethics are about the common rules, and respect, but also about the quality of this research.

#### 3.1 Research Task and Question

Based on pertaining research, I see great value and numerous possibilities in oral health promotion based on creative approaches. In this thesis, I am especially focused on exploring what creativity-based approaches of oral health promotion bring out in preschool children. The purpose is to learn about the meaningful aspects of pedagogical workshop process that could influence the children's oral health promotion in the future. I also wished to deepen my own understanding of multidisciplinary cooperation for oral health and a healthier society.

In my thesis I am exploring attitudes, understandings, and experiences of preschool children on dental care. Through a creativity-based workshop, my aim is to educate and create an experience, through which the children can participate and share their thoughts and insights on the subject. My research question is: What does creativity-based oral health promotion bring out in preschool children?

## 3.2 Methodology

This is a theory driven empirical research study, creativity and arts-based research as well as qualitative research. According to Leavy (2020: 18), arts-based research and qualitative research "are holistic and dynamic, involving reflection, description, problem formulation and solving, and the ability to identify and explain intuition and creativity in the research process." Reflecting offers me a possibility for learning, open and honest proceedings make it possible for me to share the experience, and the creativity-based approaches bring in the creative possibilities.

The participants of this research are preschool children. Children are different than adults, and they may often be excluded because of concerns of their competence and ability. Conventional research methodologies may not even be fit for the purpose when research involves children and their experiences (O'Grady, 2022: 475). Based on extensive literature review, I argue that children may be open and receptive to benefit from creativity-based approaches in oral health promotion. In her dissertation, Riikka Hohti, used multiple ways to experience and actualize what mattered to children, and what mattered, was often something tiny or seemingly irrelevant, that could come up within funny combinations and gatherings (Hohti 2016: 77). For example, photovoice is something that has been used as an arts-based method. In photovoice children can take meaningful photos and communicate through them. It is seen as a childfriendly method do to its less verbally oriented implementation, that enables the children to participate more fully in research. (Abma et al. 2022.) Involving children in research has several challenges. Children can be vulnerable, incompetent, and powerless, but a child can also have many degrees of understanding and perspectives, a voice worth hearing, and ability to participate in research (Collier 2019: 42-44). When involving children, ethical questions about harm and benefits, privacy and confidentiality, information and consent, demand the researcher to constantly observe and reflect from the children's point of view (Abma et al. 2022).

Children can be seen as experts on their own life and including them in research is important. Research should be constructed towards doing it with and by, rather than on, and to the children. Participatory research means that the research partners are included in and even conducting the research process. (Flewitt & Ang 2020: 81–82.) I am not doing participatory simply because I do not have the resources to include the children in the process enough to call it participatory. So, this research is not participatory, but I hope to implement the workshop in a way that it emphasises the participation aspect. I wish to have the children to participate actively in a way that suits them best, to think and process the subjects, and maybe even draw conclusions and have a possible epiphany on some matter.

I chose an arts-based research methodology to involve creative arts in my research project. This methodology relies strongly on the inquiry process and values aesthetic understanding (Leavy 2017: 9–10). I believe arts-based research will help me to reach my objectives in exploring preschool children's thoughts on dental care, as it has the potential to make the experience more holistic by activating multiple senses. In research process, arts are seen as affective and empathetic way to engage children (O'Grady 2022: 477).

According to Patricia Leavy (2017: 197), "there are projects in which the artistic practice is both the method of inquiry and the content." I am aiming at conducting such type of an arts-based research approach in my thesis. By using creativity-based approaches as part of inquiry, I refer to using visual arts to activate the participants. I aim to have concrete creations from the participants in the form of visual arts as the content to support the conclusion of the thesis.

A philosophy of art-based research suggests that art has been able to convey messages and raise awareness. Art can be used to gain understanding of self-awareness and art has ways of knowing, for example by sensory and imagination (Leavy 2017: 195). As I cannot assume that the preschool children can read or write, an arts-based research methodology may be a fitting approach for my research project, as it offers another form of conversation than verbal.

This is phenomenological research, as I try to understand preschool children's experiences on oral health and creativity-based approaches in a holistic manner. Instead of objectivity, phenomenology emphasizes the comprehensibility of interpretations, and the holistic view on things. In phenomenology knowledge develops, and changes according to time, participants, and surroundings – phenomena are always changing. (Huhtinen & Tuominen 2020; Cohen 2000: 3–4.) Phenomenological research shares the desire of this thesis to really learn from the participants of the research (Huhtinen & Tuominen 2020). According to Cohen (2000: 3), "phenomenological research is used to answer questions of meaning", and with careful analysis of the data, I hope to give meanings to this process.

### 3.3 Data Construction

During two spring days in 2023, I held three workshops for preschool children at their kindergarten in the Southern Finland. Each of these workshops included six participants, so all in all eighteen children from the cooperating preschool group took part in the workshop. There was a person from the kindergarten staff present at every workshop, and each time it was a different person to make sure all the regular staff that worked with this preschool group got to experience the workshop. Each of the workshops lasted about an hour.

Words and texts are often the base for qualitative research, but as the aim of the qualitative research is to get as close to the subject as possible, the methods to construct the data should be chosen to fit the purpose (Khan & Khan 2020: 45). The discussions, and all verbal comments and reactions from the participants will be used as data, but along all that, I want to consider the nonverbal interaction as data as well. As I have videorecorded all the workshops, I will be able to observe the data carefully and repeatedly (Taylor et al. 2015: 142). The implementation of the data construction was carried out as a workshop, and the data was constructed throughout the experience. This is why next, I will go through the steps of the workshop, and the reasoning behind the choices that formed the workshop.

#### The Workshop

Turku University of Applied Sciences' publication gives a compact definition for the word workshop as an occasion where the participants interact together through different methods and tools. The focus is on sharing and discussing of opinions, facts, thoughts, ideas, and insights. (Salonen et al. 2017: 63.) With that in mind, workshops provide a possibility for learning from each other. As I was eager to educate the children about dental care, I also saw a possibility to learn from and about the participants.

According to Joaquim and Camargo (2020: 9) certain particularities in the theory of holding an educational workshop are "freedom of creation and autonomy of execution." For me as a facilitator this, the workshop as a tool, brought a great freedom of going after the multiplicity of perspectives, attitudes, understandings, and experiences that the participants could provide.

I used creativity and playfulness to provide workshops with possibilities for meaningful learning on oral heath for preschool children. Jamali (2022: 66) writes, that "learning is meaningful if it is constructive, active, intentional, cooperative, and authentic." The workshop was constructive in a way that it invited the children to learn and reflect. Play activated the children to experience by doing. Oral health promotion was the motivation behind all the activities. Cooperation was a joint effort, and to support the children's thoughts and perspectives, the workshop and I were flexible, with possibilities for variables. Along with support and encouragement, pictures, stories, drawing, painting, and props were to bring different ways of learning authentically. As a facilitator I had a great responsibility to guide the participants towards meaningful learning, but in the end, people will define themselves what was or was not meaningful for them.

Talking and sharing ideas with others gain perspectives and it might even lead to interesting new questions or even rephrasing. (Flewitt & Ang 2020: 54–55.) I have had multiple opportunities to talk about my thesis project with my fellow students, and especially, while planning the workshop, they gave me valuable feedback

and improvement ideas. These conversations have led to changes, and I strongly believe those changes have made this research process better. I am eager to tell what the sharing and discussions with the participants from the workshops brought out, as it is data in this thesis.

There is an old phrase that 'a picture is worth a thousand words'. Pictures, a form of visual arts is one of the creative approaches used within the workshops. In early childhood education, pictures are a form of communication – an illustration when words are not enough. There are pictures in culture, in arts, and in media. We use pictures to observe, create and explain ourselves. Pictures have always individual interpretations, but also connections to established presentations with effects of conditions and surroundings. (Rissanen 2022: 145–147.)

My intention was to create a workshop for preschool children by using different forms of arts-based tools like pictures, drawing and painting and combine them with oral health promotion. Drawing can bring up issues that verbal or written communication might leave without mentioning. It is also important to remember that for some it can be easy to use drawing to process feelings and experiences, but for others it can be difficult to come up with a drawing without processing the matter first. (Corbin et al. 2021: 34–35.) Pictures served as a way of communication in the workshops, and artworks made by the participants were also used as data to support the findings. I believe a creativity-based workshop is a gentle and suitable approach for children that are learning, observing, and preparing themselves for the school life. The aim was to educate and promote with an emphasis on a pleasant experience for children about dental care and oral health.

New concepts should be limited to maximum of three per occasion (Brickhouse 2016: 225). This is a guideline I try to keep in mind, whether it is for personal health guidance, or for a presentation. Three things might feel insufficient, but it can also be a relief to know that it is the most people can adopt. With this workshop, it was extremely hard to limit important factors, entities of oral health knowledge, out of the plan, to keep it simple and clear for the participants.

#### Introductions with Smiles

I do not think there is a better way to start the workshop than a smile. Smiling is communicating – a way to express joy and spread kindness. Good oral hygiene might increase smiling, and it can even be seen as something that measures oral health (Culler et al. 2021). The primary goal of the introduction activity was to create a sense of belonging and safety amongst the participants, but the emotions, reactions, and words were also used as data.

As a mother I have noticed the power of using fictional characters to explain and motivate my children. For example, Etchells and Tonkin (2019: 107) write, that the beloved Peppa Pig has been noticed as "a valuable health promotion resource." Therefore, for the introduction activity I chose to have smiling pictures of fictional characters from children's movies, tv-series, and stories. Using these pictures was aiming at a low threshold introduction: everybody choses a picture they like and introduce themselves and share the picture they have chosen with others.



Illustration 1. Pictures of smiles the participants and the kindergarten staff chose during the introduction activity

In the beginning of this activity, I introduce myself as a dental hygienist: "As a dental hygienist I can perform oral health checks for children, provide guidance on oral hygiene, give health advice, remove tartar, and clean the teeth. The best thing about my job are the smiles, and now I would love to see the smiles you have chosen." This introduction aimed at sharing knowledge of me as a dental care professional, but at the same time it was formulated in a way my professional aims of achieving healthier smiles would be clear for the participants (Tsiris et. al. 2014: 12.) During the introduction activity I constructed data in a form of conversation and interaction with the participants.

## Storytime about Toothache

Playful approaches to oral health promotion for children have been understood to possibly have an effective impact, that might have an influence on the rest of their lives (Etchells & Tonkin 2019: 107). I personally love stories – how they can take us into a different place, a different time, or to a whole new way of thinking. As Leavy (2020: 43) states "stories that we hear or read can also make a deep and lasting impression", and that is why I wanted to incorporate storytelling as part of my workshop for the preschool children. I wished to share an insight to oral health care in a playful way, through a story.

During my professional years I have noticed that dental care can be a difficult and highly personal topic for some. As Piekkari (2020: 4) reminds, it is important to be sensitive, as the children might not want to directly share their own experiences. A fictional story can create safety and privacy for participants to participate and share their thoughts and experiences (Piekkari 2020: 4). Storytelling offered me a considerate and exciting way to share my knowledge in dental care, as well as to explore the thoughts of the children for my research data.

As I did not manage to find a suitable story, I took the liberty to create one myself. The aim was to use the story to bring out an issue and create dialogue with the children. One important factor in taking care of oral health are the regular check-

ups, as well as to seek treatment when necessary (Karies [hallinta]. Käypä hoito -suositus 2023). Fear of dental care can lead to procrastination, or treatment is sought only when absolutely necessary (Hausen 2018). The story I created for the workshop was about a bear that had toothache, but instead of going straight to the dentist, the bear tries to go on with the day hoping, that the toothache will disappear. I hoped to discover what the children thought should have been done, if experiencing toothache, and discuss about possible barriers to seek treatment.

To incorporate visual arts to the story, the children were asked to draw a picture. Before the story revealed what was found from the bear's mouth, the children were asked to draw a picture of their ques on the matter. Art can convey feelings and thoughts (Corbin et al. 2021: 5), and I was hoping to have an insight to the children's thoughts through the pictures they created. This was also meant as a personal and creative way for the children to participate during the story.

In the end of the story the bear had help from a bunny, that represents a dental care professional for the forest animals. The bear felt relieved, as the rabbit found the reason for the toothache. This way, the story is meant to promote dental care as low threshold caregiver.

As Flewitt and Ang (2020: 1) point out, "we all know something about childhood because we have all experienced it, but every person's experience of childhood is different", this was something to remember as I went through the data from this activity. I had a semi-constructed format with the story and questions for the children, with some room for variables to affect the discussion (Khan & Khan 2020: 45). The data was constructed based on the interaction during the story and supported by the drawings made. The story was designed to have the children to participate during the story through discussing and drawing. Even though I had assumptions on the children' thoughts and questions, I tried to be prepared to discuss their thoughts with an open mind, as we reflected on the story, and saw the pictures they had created.

## Activities with Toothbrush – Brushing and Painting

Parents are responsible for their children's oral hygiene, but at the age of six, it is advised that the children start to brush more independently. (Suomen Hammaslääkäriliitto 2022.) As it is conveniently timely, we practiced brushing methods by using model teeth with the preschool children. Correct brushing technique with manual toothbrush contains a gentle pencil grip, angle of 45degrees to reach for the gumlines, upright position to clean the front teeth and the brushing motion going back and forward (Heikka 2022a).

As research has proved, an electronic toothbrush cleans more efficient than a manual toothbrush (Heikka 2022a; Karies [hallinta]. Käypä hoito -suositus 2023), that is why we also had an electronic toothbrush for the children to try. Electronic toothbrushes make the brushing movement themselves, so the back and forward movement of manual brushes is not needed. (Heikka 2022b.) Even though the brushing activity was mainly facilitated using a manual toothbrush, an electronic toothbrush was what I recommended for the children to brush their teeth with at home if possible.

Jean Piaget's concept of `readiness` is about the ability to learn when the educational experience meets the learner's stage of understanding. The early stages of learning for children is to discover by themselves rather than being taught. With this concept the early educator should facilitate possibilities for children to explore themselves, rather than teach them by telling how things are. (Flewitt & Ang 2020: 18.) I wanted to provide the children a chance to discover themselves, this is why everyone got to practice brushing with model teeth. Trying things by hand makes the participants to participate, engage, and experience more holistically. This experiment was also seen as valuable data, as I observed the children's brushing skills and discussed their brushing habits during the activity.

Using the model teeth to showcase the brushing, and letting the children try for themselves was a way to give a guided experience of brushing. But when the right grip of the toothbrush was found, we took this experience a little further – the participants moved on to painting with the toothbrushes. Everyone got to paint a tooth (about the size of a thumb) made from magic dough. This gave the children an experience where they could see the paint as the trades of the toothbrush, and possibly that way get a deeper understanding of brushing. If there were time, the children could continue painting with the toothbrushes on paper.



Illustration 2. Model teeth and a toothbrush that were used to demonstrate brushing the teeth

## Greeting Cards for Guardians

When doing health promotion for children, people should understand as Berg (2016: 7) notes, that "rarely can there be good oral health outcomes for children without parental engagement", so for me it was obvious that the parents need to somehow be part of this process. As a parent I have seen the importance of sharing for my children, as they have told me about their experiences in kindergarten for example. This was the kickstart for the idea of the next activity.

I created an evaluation tool to evaluate the thoughts of the children taking part to my workshop, based on the book of `A Guide to Evaluation for Arts Therapists and Arts & Health Practitioners`. The implementation of this evaluation tool resembles a postcard, and it was a way to record a note from the children to their guardians. The messages were written by me according to the answers, as the children were asked what they would like to tell their parents about their

experience during the workshop. The cover of the postcard provided possibilities for creativity, as the children were asked to paint a picture on it with a toothbrush. (Tsiris et al. 2014.)

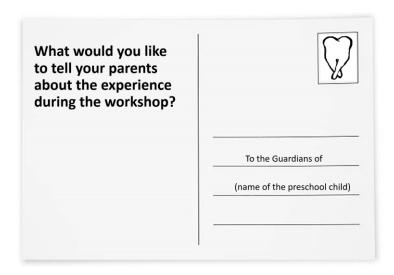


Illustration 3. A draft of the back of a postcard, used as an evaluation tool for the participants of their experience during the workshop

The evaluation tool was designed to become part of the children's overall experience, with clear structure that would be easy to understand, with appealing implementation for the participants and guardians, and the open question for descriptive personal answers (Tsiris et al. 2014: 12, 72, 77, 115). I saw this postcard as a small questionnaire designed for children, implemented with creativity. Even though I sought to explore understandings and experiences of the participants as data, this card was for the parents to hear from the oral health care workshop.

As Corbin et al. (2021: 5) describes, "art not only serves as a tool for health promotion but can also be an important bridge toward equity in both health and knowledge exchange." As the children took these postcards home, I was hoping to build sort of an art-based bridge, that connected the guardians to our oral health workshop, and that way give meanings to the children's experiences.

I used the results of the children's greetings and the pictures they painted on these postcards to gather information and understanding regarding my research question. The aim of this postcard was to serve as a window to the children's minds about the workshop, and what they had seen as valuable or fun during participating the workshop.

#### Goodies to Take Home to

Tsiris et al. (2014: 144) bring out a valuable point, as "thanking people involved in the evaluation goes a long way to generating goodwill and trust." Because I wanted to leave a positive impression behind, I found thanking the participants as important part of the process. As acknowledgments I managed to gather some samples of toothpaste<sup>1</sup> and xylitol<sup>2</sup> for the participants, and I also wrote a thank you note for guardians. Along with goodwill, the samples were meant to pass on habits that support good oral health, and the thank you letter was to support the conversation between the preschoolers and their guardians, if the workshop had raised thoughts or questions in them. However, the discussions and reactions, as I handed out the goodies to take home to, were used as data as well.

<sup>&</sup>lt;sup>1</sup> Toothpaste Samples: Six-year-olds and older are recommended to use toothpaste with 1450ppm fluoride. Junior as well as regular adult toothpaste include the same amount of 1450ppm of fluoride, as the children under the age of six are advised to use toothpaste with 1000-1100ppm of fluoride. (Karies [hallinta]. Käypä hoito -suositus 2023.) Since the preschool children are expected to switch to a stronger fluoride toothpaste, this junior toothpaste was an excellent sample to give out to them, and to inform the parents about it.

Isola states in the editorial of Oral Health and Environmentally Related Factors Associated with General Health and Quality of Life, that "Fluorine is the cornerstone of caries prevention and is necessary for all individuals with natural dental elements" (Isola 2020: 1). Everyone should brush their teeth twice a day using fluoride toothpaste - the use of fluoride-free toothpastes is not recommended (Karies [hallinta]. Käypä hoito -suositus 2023). The use of fluoride toothpaste provides significant protection against tooth decay.

<sup>&</sup>lt;sup>2</sup> Xylitol Samples: Xylitol is a sweet way to end a meal, and it might motivate to pay attention to regular mealtimes. In Finland, xylitol samples are considered as a nice way to reward children for their visit to dental care. Although, xylitol does not cure caries or compensate cleaning the teeth, xylitol is noncariogenic and has a moderate level of protecting teeth against caries (Donly 2016: 75–76).

Xylitol gum and xylitol pastils increase saliva production in our mouth, and "saliva is very important in providing remineralization effects for tooth structure" (Donly 2016: 76). Xylitol is advised to be taken after every meal, especially before and when permanent teeth erupt. Using xylitol products is an easy habit to adopt. (Karies [hallinta]. Käypä hoito -suositus 2023.)

The samples and the letter for the guardians were my way of doing outreach work, to encourage the guardians to talk about oral health at home with their children. Reactions or consequences of the acknowledgements from guardians were not included in my research.

#### A Thank You Note for Guardians

Support for embracing healthy lifestyles should be received from oral health care, counselling centres, and other actors, such as daycare, school, hobbies, and other health care, but the responsibility for teaching healthy lifestyles rests with the child's guardians. The guardians provide the model that is central to learning a healthy lifestyle. (Karies [hallinta]. Käypä hoito -suositus 2023.) The thank you note was also a way to contribute a message from oral health care.

The letter informs briefly about the events of the workshop, and the goodies the children got to take home to. The focus of the letter was to convey a positive and caring message from oral health care and from me personally.<sup>3</sup>

### Summary of data construction methods and process

The workshops were videorecorded, and the recordings served as data for this research. The participants and their guardians were affirmed about this beforehand and everyone had given their permission for the recording. To make sure the recording to be successful, I had two separate cameras recording all the workshops. The decision to videorecord the workshops was clear to me as the recordings made it possible to get a deeper look on the whole process. Because of the recordings, it was possible to see details that would have otherwise been missed or forgotten. Also, recordings gave a truthful description of the situation without bias. (Cf. Taylor et al. 2015: 142.)

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 $<sup>^{3}</sup>$  The thank you note for guardians can be found at the end of the thesis, from the Appendices, in Finnish.

I photographed the art pieces that the preschoolers made. Turning visual images into words will always include personal assumptions, and as Leavy (2020: 257) says, "the process of conducting research is always a meaning-making activity." The drawings and paintings, made by the participants, are part of the data, but the process of making them served just as much, if not more, value as data in this process.

The postcards, that were made for the guardians, could be seen as a short questionnaire with an open-ended question on the preschoolers' experience of the workshop (Tsiris et al. 2014: 72, 77). Like I previously mentioned, the children did not write these messages themselves, and that may have lowered the credibility of the messages. But gladly I had recorded material of the situation, and that way I could analyze the situation as it had been an interview. By going through all the material, I wish to have a better understanding of the answers given.<sup>4</sup>

# 3.4 Data Analysis

Right after the workshops, the data was carefully stored, and deleted from the cameras. The video recordings and pictures were stored on two separate external memories. The video recordings were only for me to watch, and they will be deleted after completing the thesis. The pictures show only the artworks of the children, and the greetings we wrote for the guardians. The pictures are part of

As I left and said goodbyes, I got such warm and heartfelt goodbyes from the kindergarten group. There were such happy faces, cheerful thanks, and one of the participants even said that I will be missed. I left grateful and happy, and I felt like for me this project had already been a success on some level.

<sup>&</sup>lt;sup>4</sup> Unfortunately, there were some children that could not make it to the workshops. I felt like they deserved to have the change to take part in these activities, even though they were not able to take part in this research. So, I left some material to the kindergarten with instructions, so that these children could add their choice of a smiling picture to the group collage, paint a tooth made out of magic dough, and get the goodie bags of xylitol, toothpaste and a thank you note. The kindergarten staff were also noticed and given some xylitol and toothpaste as a thank you for this cooperation.

data, and some are displayed in the thesis, or used when presenting the workshops.

To analyse the data constructed in and through the workshops, I chose to do qualitative content analysis, because, like Kyngäs (2020a: 11) says, "content analysis is a useful qualitative analysis method due to its content-sensitive nature and ability to analyse many kinds of open data sets." In practice, to quote Khan and Khan (2020: 46), this "simply means to look for themes and organize them." As I wished to implement the research in an open, reflective, and playful way to maintain a sense of creativity (Uusikylä 2012: 43–45), I believe the content analysis fitted the need, and provided me enough freedom and guidelines to find the meaningful issues around the subject.

Inductive content analysis is an open approach with flexibility and room for variables in finding the main themes (Kyngäs 2020b: 14, B). Inductive content analysis is used when the experiment has not been made before, and the conceptual framework provides fragmented knowledge on the subject (Khan & Khan 2020: 46). As this method fits well with the emphasis on creativity, and the aim of keeping an open mind regarding the data, I utilized it as I did my analysis. Even though the data construction was theory based, it was also a unique ensemble that could be affected by multiple unpredictable variables. This is a theory-driven study, but I wanted to focus on the data without preconceived categories or theories first, before connecting the cluster to the conceptual framework. So, I analysed the data with an open mind, not thinking about the concepts behind the process, and that game freedom and flexibility to create the cluster naturally, as it came to me. By giving my full focus on the data and making notes of every little thing, that I could take from the data, the meaningful moments started to emerge. Themes and patterns would then appear from the cluster, and after categorizing the cluster, I connected it to the conceptual framework.

First the data was in a chronological order according to the creative activities we did, and then I started to code it according to the meaningful themes. Coding the data aims to organise it so, that the codes can be grouped or categorised, and

that way going through the data gets more systematic (Tsiris et al. 2014: 120). Then the data from the video recordings, pictures, and postcards was coded according to themes that raised from the material. Themes with common elements were put together to form categories, and each category gave an answer to the research question from a cluster. (Khan & Khan 2020: 46.)<sup>5</sup> I went through the text highlighting the content with different colours, that at that time represented four themes: learning, sharing, respect, and communication. As I had four categories I sorted the data to separate files and started to connect it with the conceptual framework. During the process, after serious consideration, one of the categories was left out due to ethical reasons. As I started to have theory behind my findings, the themes would evolve, and some of the data switched from one category to another.

The researcher is supposed to explain the messages from the data without changing the meanings. So, I was the one searching the valuable content, interpreting the messages, and using supporting data to clarify and give depth to the findings. (Khan & Khan 2020: 46.) The video recordings proved to be pleasant and reliable source of data, as I had the change to watch them as many times as necessary to make sure my notes were accurate. I was content with the cluster that I had to work with, but I felt the pressure as I started to connect the theory with the categories to form the findings. As I went through the conceptual framework, my confidence grew stronger, as I found meanings to the findings. In terms of value, the content and the findings are seen highly valuable when the review and reflection has been made openly and critically, with high standards of transparency (Flewitt & Ang 2020: 77). Critical thinking should be inseparable part of going through the findings, and that way feeling the pressure belongs to the process.

Carefully chosen data is presented. The meaningful data, that is being presented, is picked while keeping the research question in mind. The findings based on

<sup>&</sup>lt;sup>5</sup> An early cluster in chronological categories will be found from the Appendices at the end of the thesis.

data analysis answer the research questions of: What does creativity-based oral health promotion bring out in preschool children? The issues that were irrelevant for this research, things that for example did not answer the research question, or issues that could have been unethical to discuss, like data that could be identified or be harmful for participants, were left out.

## 3.5 Research Ethics and Researcher Positionality

In the beginning of this thesis process, I read the publications of research misconduct and ethical review in human sciences of the Finnish National Board on research integrity (TENK 2019, 2023). According to TENK (2019: 8), every researcher in Finland "respects the dignity and autonomy of human research participants... respects material and immaterial cultural heritage and biodiversity... conducts their research so that the research does not cause significant risks, damage or harm to research participants, communities or other subjects of research." This research was conducted following these guidelines.

As a dental hygienist I consider oral health promotion as one of my most important missions. Taking care of good oral health is part of everyday life – everybody is responsible to take care of their own oral hygiene. But indeed, oral health should also be supported by the society that guarantees healthy environment, access to information and available services. Improving the health of the living environment requires cooperation between different sectors within the municipalities. (Karies [hallinta]. Käypä hoito -suositus 2023.) This thesis is about oral health promotion, but it is also about cooperation to achieve the common good.

A counselling approach, that is widely used in dental care to achieve the goals of effective oral health promotion, is called motivational interview. Motivational interviewing is a method used by many health care professionals to strengthen motivation for positive and healthier choices. It uses open-ended questions and reflective listening, offers support without judgement, and encourages and seeks to find ways for better health. In dental care it can be a brief discussion during a

dental appointment. This person-centred and goal-directed method has four elements: partnership, acceptance, compassion, and evocation. (Brickhouse 2016: 237–238; Boyd et al. 2020: 408.) As these are also values and objectives that drive me as a dental hygienist, and I wished to implement this thesis by following these ethical thoughts throughout the process. I find these elements ethically appropriate, and suitable with my thesis.

Cooperation with different parties will always consider comprehensive planning. The research plan of this thesis, along with informed consent, participant information letter, and data protection documents, were carefully gone through with the supervisor at the Metropolia University of Applied Sciences<sup>6</sup>. The cooperation with the municipal kindergarten required a research permit from the municipality's director of early childhood education. After getting the permit, an agreement on thesis collaboration was made between myself, the Metropolia University of Applied Sciences and the collaborating kindergarten of the municipality.

As TENK (2019: 9) describes, "the fundamental starting point of research with human participants is the participants' trust in researchers and science." The most important bond of trust would be built between me, the researcher, and the participants, the preschool children. Participant information sheets and consent forms were given to the participants and their guardians approximately ten days before the workshops. The sheet provided an invitation to participate, information about the nature, aims and practical arrangements of the research, and contact information for further questions. The Consent Forms were all returned with signatures of the guardians, as every child from this preschool group got a permission to participate in this research.

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<sup>&</sup>lt;sup>6</sup> These templates will be found in Finnish at the end of the thesis as appendices: Informed consent as tutkittavan suostumuslomake, participant information letter as tutkittavan informointilomake, and data protection documents as yhteistyösopimus.

As the participants of this research are minors, guardians need to be informed, as well as the children need to be provided with age-appropriate information and actions to understand the situation (Korhonen et al. 2019: 10–11). I believe that to succeed, this research needs to acknowledge the preschool children at every step of the way. The workshop is specially designed regarding the age group of five- to seven-year-olds. Better understanding leads to better provision for children, and to exceed this, adults need to value and appreciate the perspectives of children (O'Grady 2022: 477). During the process there was room for variables and a flexible approach to changes, as through communications, I made sure that everybody would understand that the research would be based on voluntary, and the needs and wants of the participants were highly valued.

As in Finland, all children participate in preschool education. This makes the cooperation with municipality's preschool kindergarten group a good place to reach children from different backgrounds. There are socioeconomic differences in Finland, and according to research in Finland people with lower educational level are not taking as good care of their oral hygiene as others (Heikka 2022c). As Berg (2016: 1) points out, "we have the tools to available to us prevent most dental caries in children at a very early age, yet we have seen an increase in dental caries in pre-schoolers in recent years."

During a discussion of thesis projects with a fellow student from the Creativity and Arts in Social and Health Care Fields Master's degree program, I learned that a safe place cannot be guaranteed, but a safer space should be aimed for (Perttola 2023). As the subject of dental care can be sensitive for some, it is especially important to create a safer environment to ensure a pleasant experience. Through the workshop, I planned to create a creative climate with the resources that I had and endorse it with encouraging and understanding presence to create a safer environment for the participants to experience dental care related activities and express themselves. Facilitating a creative climate supports the aim of gaining more insight of participants' experiences. Approaching the children with curiosity and respect, I wished to earn their trust,

and create a relaxed atmosphere to support their creative attitude to provide possibilities for creative thinking. (Jamali 2022: 63–64.)

Although this thesis is implemented based on my personal choices, I am after a greater good, and wish to see this research bringing value to others as well. I shared my knowledge and used my professional skills for motivating towards healthier choices for healthier smiles. As one of the many researchers, to share my understanding, I carry out this research with integrity, and be as reliable, honest, respectful, and accountable as I can be (TENK 2023: 11–15). Every encounter was an opportunity to leave a positive impression. I kept the collaboration with the kindergarten clear and flexible, by being available, being prepared, and taking their wishes into account. I passed on the information about the workshop for the guardians and provided them with my contact information for further inquiries. The participants were on my mind through the process, from the very start till the end – this research was for them.

# 4 Findings

In this chapter I answer to the research question of this study: What does arts-based oral health promotion bring out in preschool children? After establishing my conceptual framework, I set out to find out, if the importance of oral health promotion would get supporting proof through the experiences in the creativity-based workshops for preschool children. Next, I will discuss the findings, that included excitement, laughter, serious pondering, questions, and desire to share and experience, to mention some of the things to begin with. This group of preschool children with different characters, skills, thoughts, and knowledge created an experience with answers to my research question, and more.

# 4.1 Excitement and Engaging through Playfulness

The sense of play got the children excited (Brown, 2008) from the very start, as they saw the pictures of smiling well-known children's characters placed on the floor. When the children were gazing at the pictures and trying to find their favourite picture of a smile, I could feel the creative climate this activity created (Jamali 2022: 63–64). All the children were excited to choose a picture and present it, as we introduced ourselves. Supporting, guiding, and encouraging was easy, when the activity itself boosted the atmosphere. As a facilitator I made sure everybody was heard and acknowledged. (Ogienko 2016: 86.) This introduction activity was particularly pleasant for me because the children seemed to be enjoying it and it was easy for me to notice and pay attention to everyone in turn. This activity was well chosen because it sparked curiosity and enthusiasm right away. As there was something new, something familiar, and something personal, this activity provided an enjoyable way to get engaged in the workshop (Whitaker & Tonkin 2019: 7, 9).

I was pleased to hear that many of the children enjoyed stories. "Yay! I like stories", said one of the participants in the second workshop as they heard I would read them story. The props I used during the story were admired and caught the children's attention. Using the props made the experience a bit more effective, as

in addition to just hearing, the children also saw part of the story through the props (Lee & Reeves 2018). A teddy bear, the main character, was carefully examined from its girly eyelashes down to its slightly differing paws. The bunny ears made the children laugh, and a participant with a big smile said, "I like bunnies", as soon as they saw me grab the bunny ears. A dental mirror made the children lean towards it to have a closer look at it, and the dental tweezer was recognized, as one of the participants noted that "the dentist has similar tweezers." The reactions from the participants made me feel like the children were engaged by following and understanding the story (Leavy 2020: 12).

Discussing tooth ache through a story brought up the subject in a playful atmosphere, with low pressure for the children (Piekkari 2020: 4). I believe trust and safe environment were also boosting (Morney 2022: 1, 4) for the children to get engaged to the story, as they were listening and participating actively by answering my questions. I asked the children, what do we do if we have a toothache. At every workshop, I quickly got an answer: "We should go to the dentist." In the first workshop, there was a child worried that the toothache might be caused by caries, and in the third workshop a child reminded of the importance of brushing the teeth. All the children agreed that swimming (that represented something fun to do), eating, or sleeping would not take the toothache away. Even though these were things that we all knew, I learned about the children's understanding of toothache. I also had a chance to support the children's thought of going to the dentist, as even the thought of going to the dentist might sometimes feel a bit scary (Sirviö, 2019).

One of the most enthusiastic subjects of conversations was the stage of eruption of permanent teeth in the participants' mouths. In every workshop, the children wanted to share what was going on in their mouth: "I've lost teeth, look!", "I have a loose tooth", "I have permanent teeth here and then one of my teeth is loose", "I have a crooked tooth, a permanent tooth." This open and respective conversation had a shared intent as the children wanted to showcase the stage of their dentition, that strengthened the commitment of the group (Whitaker & Tonkin 2019: 16). As we can imagine, the stage of eruption of permanent teeth

differed amongst the children (Suomen Hammaslääkäriliitto 2022), and that increased the curiosity amongst the group. The children were happy to tell me what was going on in their mouths, regardless of the situation: "I haven't lost any tooth yet", "I have two permanent teeth", "I have eight."

Everyone had an experience of their own, and there must be diversity and complexity of experience in every child (Flewitt & Ang 2020: 1). As we wrote greetings to the children's guardians, every participant got to think and reflect about the activities we had done. The children were asked to reveal their favourite moment of the workshop, and even though this was designed as an open-ended question, most of the children needed reminding of what we had done. When going through the activities of the workshop, it made the question to be more of a multiple-choice question, but this way the children were more comfortable giving their answers. Children's favourite activities varied in every workshop, and all the activities were mentioned by someone to be their favourite activity. There was a participant that particularly liked listening to the story, and two of the participants enjoyed the most of the task to draw a picture of the cause of toothache. Practicing brushing teeth can sound dull for some, but three participants thought it was the best part of the workshop. The most popular activities were picking the smiling pictures of children's characters and painting on a tooth with toothbrushes. One of the participants would not choose a favourite as they said, "Everything has been nice here." According to all of this, I am very happy with the play, that was incorporated in this workshop, and the children were receptive towards the implementation (Brown 2008).

Giving out samples was another exciting moment, and I was happy it provided a way to continue this experience to the children's homes. "Those are my favourite gum" and "these are my favourites", were some of the expressions of enthusiasm, as I dug out the xylitol samples. The children were familiar with the concept of xylitol being good for their teeth. "Even gum is good for the teeth", noted one of the participants, as I distributed the samples for the children. Xylitol was received as a treat amongst the children, and it was nice to be able to thank the children

with "so many goodies", like one of the happy participants stated with all the samples in their hands and a big smile on their face (Tsiris et al. 2014: 144).

## 4.2 Facilitating Possibilities for Meaningful Moments

The workshop as a forum for sharing (Salonen et al. 2017: 63) worked well throughout all the activities. Oral health as the main theme, made the intention of the workshop clear for the participants, and this made it easier for the children to start conversations and share their thought on the subject (Jamali 2022: 66; Tsiris et. al. 2014: 12.). The discussions gave perspectives and insights (Flewitt & Ang 2020: 54–55), that with more time, could have led to even more knowledge, and potentially even more effective learning with the preschool children.

The introduction activity was a great way to start because most of the smiling characters were familiar for me and for the children. This activity provided me a chance to give every child their deserved attention, as they introduced themselves and the picture of a smile they had chosen. Shared interest and understanding of the fictional characters created a connection between me and the participants, a feeling of respect, and open conversations (Whitaker & Tonkin, 2019: 16). The children were eager to share and discuss things that were familiar to them. "I like watching this", "I have watched that movie", "me too", "I like those too", were some of the comments heard, as we went through everybody's pictures.

There were moments when the children needed reassurance or did not know what they were expected of. I wanted to support safer environment, and these moments when the children needed reassurance, offered me an opportunity to express my trust by supporting and sharing in an open and honest way (Perttola, 2023; Morney 2022: 1, 4). Out of all the 18 participants, nobody wanted to share an answer to the question of what dental hygienists do. There was one participant, that had the courage to suggest that "probably something to do with a dentist?" All the other children were quiet and maybe shook their heads. As I told the children about my profession, the children listened, paid attention on what

I was telling, and requested politely to speak. Even though me and my profession were not familiar to them, the children had a certain respect for me. Mutual respect is important to enable sharing an understanding (Whitaker & Tonkin, 2019: 16), but I also felt like at times the children were trying to find answers that would please me – but I must admit I tried myself to give answers that would please the children. Maybe the uncertainty of the desired answer made the participant answer with a question, instead of stating his point.

During the story of a toothache, I had a task for the children to draw a picture of their guess on what was causing the toothache in the bear's mouth. Incorporating drawing was to offer an alternative way for the children to form their thoughts (Corbin et al. 2021: 7). I tried to explain, that this question had no right or wrong answers, and it is just the matter of their imagination what the answer would be, to encourage the children to express themselves (Pääjoki 2020). Despite the instructions, the children were hesitant and required more information: "What was it?", "I do not remember what it was", "I can not draw", "Can I write it?" These were some of the questions that raised in the first two workshops, to sort of make sure their answers would be correct. Gladly the children were comfortable enough to require further discussion, because after some reassuring and making the children feel safer with their ideas (Kronqvist 2020), they were happy to focus on drawing.

Creative approaches, like drawing and painting, needed often more specific guiding (Corbin et al. 2021: 34–35). As the children were struggling to start drawing or painting, they would ask me to repeat what I wanted them to do. I would repeat the assignment, encouraged them to creativity, and ensure them, that there would not be a wrong way of doing this. Still, they would look at me and sort of wait for more. Every time for a short moment, I hesitated, because I did not want to affect the children's artwork, but at the same time I knew they needed to process the matter or get an approval for their idea to get started (Corbin et al. 2021: 34–35). So, I facilitated the conversation further by referring the ideas we had discussed before and I asked more ideas from the participants. As thoughts were spoken aloud, the children started working on their artwork. After deciding

what to do, the children were happy to express themselves through art, and in the mean while interact with others by comparing and discussing their artworks (Pääjoki 2020). For a moment I was afraid to influence the children's creative process too much, but it is part of the process, as children's creations are creative no matter where the idea came from (Uusikylä 2012: 141–142). The discussions made the children share their thoughts quit easily, and the artwork would rely on the discussions. This highlighted that the process is often more important than the end result itself (Pääjoki 2020).

In the end of the story about tooth ache, the cause of the toothache for the bear was a mouse hibernating between the bear's teeth. This unexpected finding made the children smile and laugh, but it was also found a bit questionable for some of the children. "Except that mouse actually looks much bigger for that bear's mouth" said a confused participant after looking at the teddy bear and the stuffed mouse toy, that I had as props for the story. I think the comment from the participant highlights the importance of the props to vivid the children's imagination. The props created a deeper attachment to the story, and I believe that way I got the children to be more engaged to the story (Leavy 2020: 12). The question also revealed a deeper reflection, where the participant did not just listen and accept the outcome (Fornasiero, Malucelli, & Sateriale 2022: 81). Even though the matter was slightly off topic, reflecting is a chance to learn, and this question brings to the surface the possibilities of meaningful moments, that rely on reflecting and reviewing (Greenaway & Knapp 2020: 260-262). After explaining that the bear in the story would actually be a lot bigger, the participant was content and happy with the ending of the story. Next time reading the story, I should use a bigger teddy bear or a smaller stuffed mouse toy as props - or maybe not.

Brushing with model teeth provided a hands-on experience for the children to learn by doing (Lee & Reeves 2018). All the children got to try brushing with model teeth. Teeth brushing skills varied amongst the children. Even though, everybody brushed while the others were watching, it seemed as there was no pressure, and nobody judged anyone. I was the only one guiding and the children followed.

The brushing activity made sure everybody was able to hold a brush, and then we moved on to painting with the toothbrushes. Everybody got to choose a tooth made out of magic dough and paint it as they liked, while at the same time practice their brushing skills. This assignment was received with enthusiasm amongst the children: "It is quite funny to paint with a toothbrush", "Can I keep this (tooth made of magic dough)? Oh yeah!"



Illustration 4. Some of the teeth (made of magic dough) painted by the participants

Sharing brought up situation to motivate towards better choices (Salonen et al. 2017: 63). A member of the kindergarten staff brought up an important issue, that during the hectic mornings brushing teeth might be forgotten. Some of the children admitted, that they would leave their teeth without brushing in the mornings. The reasons for not brushing in the mornings were lack of time or forgetting about it. As we had just practiced brushing, some of the children got excited about the idea of brushing by themselves if their parents did not have the

time for it. We also discussed about waking up a little bit earlier and brushing the teeth as the first thing in the morning, so it would not be forgotten. This conversation brought a valuable chance for me to motivate and find ways with the children to motivate them to brush their teeth in the mornings as well – as it is an important factor in oral health (Heikka 2022a).

There ended up being lots of things to share regarding dental care and oral health (Salonen et al. 2017: 63). The children were happy to share about their toothbrushes and brushing habits. "I have an electronic toothbrush and a normal toothbrush", told one of the participants, and "I have one that shows how long to brush. It has a penguin, and a kind of light. As long it blinks, you need to brush", shared another. I think I felt the joy from the children, as they wanted to share, and I wanted to know. And as much as I enjoyed sharing my knowledge on dental care, they enjoyed sharing their own knowledge and experiences, and this way the phenomenological desire to learn from the participants was easy to accomplish (Huhtinen & Tuominen 2020).

When handing out samples of toothpaste, I told the junior toothpaste sample would have as much fluoride as the adults' regular toothpaste. It aroused a doubt in the children if the toothpaste would taste strong. "Is it strong?" asked one of the participants in the first workshop, and together we looked up the flavour, that was described as "mild fruity". It was nice to provide a lowkey chance for the children to try out a new toothpaste at home, and guide towards recommended habits to support oral health (Karies [hallinta]. Käypä hoito -suositus 2023; Suomen Hammaslääkäriliitto 2022).

# 4.3 Sense of Community

These preschool children seemed to have a great group dynamic, where sharing was natural for them and the children could rely on each other – they had a community (Aro 2011: 52-53). This experience reassured me, that the preschoolers are already well-aware of their surroundings and the pressure of the society (Uusikylä, 2012: 78). They were interested in each other's picks: "Which

one did you choose?." They were happy to find resemblance from each other's artworks and daily routines: "Apparently we got the same ones", "We have the same thing." The children were also trying to find reassurance from each other, as when the groups were asked something, the children would raise their hands and then look around to see what the others had answered.

The task to draw the cause of toothache, would serve as a good example for interaction amongst the workshop groups. The drawings were personal but had strong connections to discussions and the workshop (Rissanen 2022: 145–147). With the first group we discussed tooth trolls and caries, tartar, and a blueberry rind between the teeth. As we went through the pictures these same themes were found from the pictures the children had drawn. With the second group the discussion was about a possible caries, tooth trolls, candy, and something that has stuck between the teeth. The pictures from the second group represented teeth with caries, teddy bear with caries, tooth trolls, and honey. The pictures from the third workshop were also results of the conversation, but this group got really excited about the idea of drawing a tooth troll. "I will draw a tooth troll as well", said a participant that got excited about the idea after hearing another child was going to draw one. So along lollipops, cavities, and piece of meat, everyone in the third group drew a tooth troll, or a group of tooth trolls. I felt like the artworks were bringing the experiences of the conversations together.



Illustration 5. Drawings of tooth trolls (first one with a lollipop) made by the participants

As the children were eager to share the discussions gave me an insight to the children's oral hygiene habits, but also to the children about each other's oral hygiene habits (Nerantzi et al. 2021: 5, 8). Four out of six children in the first workshop told me that they had an electronic toothbrush at home, and in both, the second and the third workshop there were three out of six children that shared they had one as well. In total, more than half of the children wanted to let me know about their electronic toothbrushes at home. The discussions confirmed that the children were in a phase where some of them had already started to brush their teeth more independently (Suomen Hammaslääkäriliitto 2022). As the children's thoughts and habits might differ, the conversation remained polite, curious, and thoughtful. When I asked, who had already brushed their own teeth by themselves, everybody in the first group raised their hands eagerly, and then the looked at each other to see what the others had replied. In both, the second and the third workshop, there were three children that shared, that they had already brushed their teeth occasionally independently. The conversations were constructive: "I, by myself, brush in the morning, but then mom and dad brush in the evening", "We have the same thing", "My dad and my mom brush my teeth, because I don't know how, yet."

One of the most meaningful moments for me personally was a moment of trusts, that I felt from a participant (Huhtinen-Hilden & Isola 2018: 12). Looking at the floor and after gathering courage, a participant started, "Jonna, as you're like a dentist or someone like that..." and I felt so honoured that the participant felt safe enough to ask me something that had been bothering them. For me the most valuable thing was, that the children could feel safe enough to share things that had bothered them, as well as to share things that differed from other participants' answers. Creating an excepting and supportive atmosphere (Uusikylä, 2012: 41–43) was important for me, but I feel like this was already created amongst the kindergarten group at the kindergarten. The workshops were held in the spring and that meant that most of the children knew each other well, as they had been in the same kindergarten group since the fall. Although the group dynamics

seemed to work well with the children already, I do feel like the creativity-based activities created a safer environment for me and the children to engage to this process, and experience together (Leavy, 2020: 12; Pääjoki, 2020).

The cover side of the greeting card for guardians provided space for the children to paint a picture of their choice with a toothbrush. The pictures of the participants included hearts, rainbows, a tooth troll, a tooth fairy, a toothbrush, an airplane, a windstorm, and a lot of teeth — in fact, the participants of the third workshop decided all to paint a picture of a tooth. These paintings had feelings and thoughts of individuals' as well as the workshop groups' (Corbin et al. 2021: 5; Rissanen 2022: 145–147.). I thought the last workshop group's joint decision to paint teeth, was also a pleasant surprise of the group's free discussion and reflected the strong sense of community these children had (Aro 2011: 52-53).



Illustrations 6. Cover sides of the greeting cards for guardians showing "a tooth troll running away from the dentist", and a rainbow, painted with toothbrushes

## 5 Conclusions and Discussion

This is my research question: What does creativity-based oral health promotion bring out in preschool children? Attitudes, understandings, and experiences of preschool children on dental care and oral health were explored during a creativity-based workshop. The workshop was implemented with hopes to gain meaningful aspects of pedagogical workshop process that could influence the children's oral health promotion in the future. A summary of my key findings, conclusions based on those findings, and discussions in relation to the research problem and the pertaining research are presented in this final chapter. My professional understanding of multidisciplinary cooperation for oral health and a healthier society are included as an inseparable part of the discussion.

## 5.1 Summary of the Findings

A workshop about oral health promotion through creativity-based approaches brought a dental hygienist and a group of preschool children sitting together on a kindergarten floor. Through discussions and playful, less verbally oriented creativity-based implementations, that made the participation more holistic, we started to communicate and connect (Abma et al. 2022). The emphasis was on a pleasant experience for the children that would leave a caring message from dental care. The workshop was constructed and intentional, but also open for new ideas and perspectives that might lead to the unpredictable (Jamali 2022: 66; Flewitt & Ang 2020: 54–55).

Playful activities got the children excited (Brown, 2008), that made it easy for me, the facilitator, to connect with the children and get them engaged with the subject. Curiosity in the children aroused an engagement to the subject, that encouraged them to participate in discussions and ask questions (Collier 2019: 42–44; Piekkari 2020: 4). I wanted the children to feel comfortable and enjoy the approaches used in the workshop - I see it as important that the children can 'have fun', or play, as there is the child's right to play. Even though children are capable of many things and bring valuable perspectives to research, they can

also be vulnerable, or unable to hold their own rights (Collier 2019: 42–44). The choice to embrace the playfulness to engage and enable children (Whitaker & Tonkin 2019: 7, 9), was also an ethical choice for the process.

Workshop provided numerous possibilities for sharing, that enabled connections between the participants and me, the facilitator, as well as with the subject. With creativity- and arts-based approaches like drawing and painting, the groups needed to process the matters before getting started (Corbin et al. 2021: 34–35), and the artworks made by the participants were often strongly linked to the discussions (Rissanen 2022: 145–147). The workshop was implemented to encouraged participants to reflect the experiences of dental care and oral health to create possibilities for deeper attachment and meaningful learning (Greenaway & Knapp 2020: 260-262). Possibilities for meaningful learning were created as the workshop had a clear intent to process oral health and dental care, it constructed the children to share and reflect, it provided experiences through multi-sensory approaches, all the participants were valued and included during the workshops, and an open atmosphere was supported through respect, encouragement, and being available for the participants (Jamali 2022: 66).

As I shared my knowledge and perspectives to the preschool children, in return I received their thoughts and ideas. During the conversations there was a sense of understanding, as participants and I would ponder and react to what was told – the conversation was interactive (Whitaker & Tonkin 2019: 16). The children were receptive but dared to be different. Personal questions were asked, personal experiences were shared, and some of the presented matters were questioned. Little things, like participants questioning what was said, gave signs of reflecting, that was significant in providing something meaningful through the workshops (Hohti 2016: 77). These signs of open conversations, and reflective listening support the perception, that this workshop provided possibilities for learning and even personal growth for the participants as well as for myself (Uusikylä 2012: 43–45).

As a facilitator, I felt respected as the children listened and followed the instructions, but at times when the children needed reassuring, or assisting from me, I felt like I was becoming part of their team, their community (Nerantzi et al. 2021: 8). The preschool children had great group dynamics, as they paid attention to each other and made joint decisions. The preschool children's kindergarten group was a community with respect and trust, that created a safer surrounding for the participants to express themselves and achieve a deeper learning (Clark 2020; Morney 2022: 1, 4), but the children were also receptive enough to welcome an outsider to their community (Brown 2008).

# 5.2 Conclusions from the Findings

I experienced the oral health promotion through creativity-based approaches as a valuable experience for the participants and myself. It was a child-friendly approach that made the experience exciting, more holistic, and more ethical for the children (Abma et al. 2022). The workshop created possibilities for meaningful moments as an encouraging context (Clark 2020), that could potentially leave positive marks regarding dental care – even a minor thing can have an impact and provide a chance for a better wellbeing in their future (Kilpeläinen et al. 2013: 27).

During my master's studies I had a lecture on Human-centered service design, experience design and experience economy, where we learned that to have a holistic experience we need head, heart, and hand, but to make the holistic experience meaningful we need to reflect (Elme, 2023). This thought was very strongly on my mind already when planning the workshops. I believe the combination of oral health, that is important for our wellbeing (Suominen 2021), and creativity-based approaches, that provide a more holistic approach (Leavy, 2020: 18), made it already easier to achieve something meaningful. The storytelling, discussions, and assignments in the workshops were meant to make the children think and use their heads. The workshop was designed to have room for options and personal interpretations to support personal experience, those gently heartfelt decisions. Activities with toothbrushes and arts made sure the

participants had a hands-on experience. Reflecting, on the other hand, can be something we do on our own, but it is still important to direct the participants to reflect. In the workshops, in addition to discussions, we had the greeting cards for parents that asked the participants to name something that was 'fun', or pleasant in the workshop. The thank you notes for guardians were also meant for the reflection to continue at home with parents, but unfortunately, I do not have any data on how the notes were taken or used. All in all, oral health promotion and creativity-based approaches created potential for meaningful moments, but as Elme (2023) stated "experience is always different, depended on the person."

The importance of early oral health promotion is crucial (Berg 2016: 1), and the preschool children are at the age, that requires careful oral hygiene (Suomen Hammaslääkäriliitto, 2022; Karies [hallinta]. Käypä hoito -suositus 2023.). This group of preschool children proved me that they were receptive and eager to learn through playful approaches (Brown 2008), and they were open for ideas and guidance, that enables an influence on their choices in the future (Etchells & Tonkin 2019: 107). The skills and knowledge varied amongst the participants, that led to constructive conversations and chances to support healthier choices in the future (Brickhouse 2016: 237–238). The way the children relied on each other, and wanted to do the right things, made them open to changes that could support the whole community's oral health (Nissinen 2019; Karies [hallinta]. Käypä hoito -suositus 2023).

I would say that the pressure of the society had already reached the preschool children, and as it might decrease the children's creativity (Uusikylä 2012: 78), it might make them more easily adjustable. This leads to an important point, that making the children act the way I want, is not the goal of this project and it should not be the goal of anyone. In order for anyone to be able to change their habits, a decision must arise within themselves (Boyd et al. 2020: 407), and this highlights the importance of the guidance to be joyful, engaging, supporting, and personal.

Based on the findings of this study, I would recommend oral health promotion through creativity-based approaches for all preschool children. Creativity-based approaches provide a more holistic and child-friendly way to experience a positive insight of dental care and learn about the impacts on wellbeing (Abma et al. 2022), not to forget, that oral health has an influence on all the children (Berg 2016: 11). The children were focused while doing arts, and it often added discussion and reflection, as the children were eager to share their own creations and see what the others had come up with. Hands-on experiences practice the children's skills, but also provide the facilitator and the kindergarten staff with valuable insights to the children's abilities, like for example brushing their teeth. Play came naturally for the children, as they were excited about making choices, and using props was an easy way to get children more engaged with a story. Oral health promotion for preschool children through play and creativity could provide a pleasant and engaging way to guide the children towards healthier habits and possibly reduce dental anxiety (Marshman & Campbell 2017). Fear is a natural reaction, but in dental care it can lead to severe neglect of oral health, so a pleasant experience of oral health promotion might be significant in a child's life (Pohjola 2021; Sirviö 2019).

When I think about problems in attempt to create meaningful oral health promotion, the lack of time is strongly on my mind. I was working within a timeframe for the workshop, and that left out a lot of valuable content, but most of all, it left out time to be even more present, and more available for the children. Even though I do think there were experiences, connections, and reflection for learning, and minor things that can have an effect (Kilpeläinen et al. 2013: 27), I believe, that a longer period with the participants would better the outcome and longer the effects of it. In workshops, sharing and discussing creates possibilities to learn for all (Salonen et al. 2017: 63) – not just for the participants, but also for the one facilitating. Even though this experience of oral health promotion for preschool children could benefit just about any dental care professional, this method could have potential in a curriculum for dental hygienists. I would suggest an oral health themed week at a kindergarten, where a student of oral health care would participate in preschool kindergarten group's regular activities and

incorporate oral health promotion to activities and discussions through creative approaches. This experiment could benefit the children as well as the student.

### 5.3 For Further Research

This master's thesis project brought up many ideas for further research. Research with children through participatory research, making the children part of the research process and practicing social justice at the same time would seem meaningful (Leavy 2020: 28). Auto-ethnographic research to self-awareness (Earl et al. 2016: 215) to improve professional and social skills raised from my personal reflecting. Cooperation with different fields in research of dental care professionals, to spread awareness of oral health, offers a challenge, but it could also be rewarding, as sharing might lead to learning something new (Flewitt & Ang 2020: 54–55).

Throughout this master's thesis process I have thought about possibilities to increase cooperation in oral health promotion, as oral health of the society would benefit from cooperation (Karies [hallinta]. Käypä hoito -suositus 2023). For me, it seems like there is much more professionals in Western countries could and should do to prevent oral diseases in cooperation with other fields. Just like Isola (2020: 3) says, "the fact that prevention represents a fundamental measure in terms of efficacy and favorable cost-benefit ratio, are well known." How come the society does not utilize oral health promotion in prevention more broadly, as good oral health would benefit anybody (Berg 2016: 11). I see potential in multidisciplinary cooperation for dental care and for research, where cooperation with other fields could add possibilities to reach people that would not otherwise be reached (Faisal et al. 2022). How about research on oral health of chefs, whose teeth are exposed to continuous acid attacks due to their profession. Could quantitative research discover patterns of risks or opportunities for chefs' oral health?

Deepening my own understanding of multidisciplinary cooperation for oral health was one objective for this project, and I certainly feel like now I see more value in

my professional skills in other fields as well. Cooperation and cocreation at its best can spread knowledge and create more holistic experiences, is something I have learned and experienced through my studies. According to Leavy (2017: 20) in community-based participatory research "all relevant stakeholders are equally valued and can collectively identify core issues, problems, and solutions." I would encourage companies with different fields of expertise to combine and utilize their resources, and bravely take part in research, since there are so many possibilities that have not yet been discovered. In Finland most of the companies do not include dental care in their occupational health care, but how much would it add value in the eyes of the employee? Community-based research could bring valuable insights where all the stakeholders would have a chance to be heard.

As I am interested in self-awareness to self-development, auto-ethnographic researchers, as Earl et al. (2016: 215) refers, "typically write about and perform deep self-analysis." During this thesis process, I was worried about credibility and trustworthiness according to my interpretations - as I thought findings and conclusions would depend on my skills, thoughts, reflections, and interpretations to construct them. But along this process and during my studies, I have come to a realisation, that even if we could have access to the hard facts, in a holistic matter, we would always add our own interpretations. Talented storytellers may create wonderful convincing stories out of real facts, but only succeed in telling their interpretation of the matter. In patient work, clinicians have access to patient's background information and treatment history, but it will only tell a part of the patient's story. When working with patients, building a bigger understanding will always require communication with the patient. The one who's voice is heard will have an influence, and the one who hears it will have an interpretation. Past life events have made me reflect and ponder up on the actions and choices made. I have found reflecting a powerful tool for learning and self-development. In research I find interesting professional situations, like performing, worth a closer look, that auto-ethnographic research could support.

Children who go through orthodontic treatments attend dental care more intensively than others. I would be interested in learning, if these more frequent

visits to the dental care have an influence on the children's motivation or quality of their oral hygiene in the future. This could be an interesting topic to research and gain understanding of possible benefits of more frequent visits to dental care. Participatory research could provide a deeper understanding on the experiences of the children going through orthodontic treatments (Flewitt & Ang 2020: 81–82). Like mentioned before, when the aim is at improving children's oral health, it is crucial to include parents (Berg 2016: 7), so the consideration of parents during their child's orthodontic treatment could also be an interesting subject of research.

For children, play is never a waste of time. During last summer I visited Heureka, the Finnish Science Centre, where they had an exhibition on The Power of Play. There was a beautiful area with different kinds of activities for children, and my children were thrilled. I was trying to find reasons for the climbing frame, or for the dance corner, or the precision throw. There was no reasoning, just a name of the activity and instructions. On the way home I was wondering why it was so hard to just have fun and play, without a reason. I have heard that play is a luxury that adults cannot afford within their busy schedules, but I dare to say play is seen as a waste of time amongst the adults. This way of thinking could be about the 'creative industries' Banaji (2017: 21) talks about, where creativity can be seen to foster knowledge, flexibility, personal responsibility, and problem-solving skills to the point where creativity could be seen as a synonym for "effectiveness', thereby losing its distinctive sense." What if the play for adults was designed to be more purposeful? Would you then play? Would it be play if the purpose was more important, than the play itself? This could also be worth further research.

### 5.4 Trustworthiness of the Research

I got engaged in this thesis project (Leavy 2020: 12), as it has been constantly on my mind about a year-round. My studies, as well as the conversations and reflections with fellow students, have had a big impact on the content. Continuous advising meetings with my advisor have organized my thoughts to the right direction and at times pushed me towards a better implementation. Ideas, improvements, and changes to the process have emerged from everyday life with

my family, during workdays, and through pondering with colleagues. I have numerous notes written during lectures, train rides, or even at nights, when a thought has caught up with me regarding my thesis.

Throughout this project, I have acted as is appropriate for my profession. As a dental hygienist I have an obligation to oral health portion and preventive care, but I also have the knowledge to utilizes my professional skills when analysing and interpreting the findings. (Suomen Suuhygienistiliitto SSHL ry 2020.) This thesis process provided me an opportunity to express my desire to spread dental awareness and wellbeing through creativity-based approaches.

The conceptual framework of this thesis aimed at giving a comprehensive and compact summary of the topic. In the first subchapter I wrote about the broad topic of oral health and tried to focus on the most significant aspects regarding preschool children and preventive work. As a result, a clear entity portrays oral health care to non-professionals, but also draws focus points for those working in dental fields. The second subchapter considered creativity and playfulness, that were used to find meanings for this research. These concepts were aspired to be presented in a way that the benevolent nature of the research would be emphasized. I am happy to say, that the content succeeds in bringing out the gentle potential for meaning making of creativity and playfulness. The final subchapter ties together the previous concepts with examples of cooperations across the professional boundaries to improve wellbeing, and that way manages to highlight the purpose of my thesis process.

As I held the workshops, constructed the data, analysed it to gather findings, and wrote this thesis I believe the most significant variable in this process is me. But this research and the workshop I created, are based on researched knowledge, books, articles, guidelines, and common beliefs. I have also gotten support, and guidance from the people around me. The research emphasised the participation aspect of the children (Flewitt & Ang 2020: 81–82.), as the activities were designed for them to experience holistically with room for creativity. This thesis is my interpretation, but the children are the ones in the spotlight. I have tried to give

an honest review on the process and choose the data with care, while keeping in mind the respect for the participants and the pressure of the surroundings in life.

In the process of arts-based qualitative research, me and the participants had a holistic experience through arts-based activities, sharing, receiving, reflecting, solving and creating (Leavy, 2020: 18). Art was used as part of the process, to gather understanding and gain self-awareness (Leavy 2017: 195). Creativity-based approaches were a key factor when implementing the study. Phenomenological side to the research (Huhtinen & Tuominen 2020) was naturally achieved as the workshops were about sharing, reflecting, and learning with the participants.

Because I had the video recordings, I was able to go through the data multiple times and review it closely (Taylor et al. 2015: 142). In this thesis project the experiences were the most important data, so the video recordings were a valuable source of data with the support of the pictures of the participants' artworks (Pääjoki 2020). The video recordings made it also easier to find resemblance and meanings for the artworks, as pictures will always have connections to the surroundings (Rissanen 2022: 145–147).

During this process I read studies that had used both qualitative and quantitative research methods together. Even though I find the qualitative methods as more holistic way of doing research, I think by applying both methods the research would have gained even more insights and that way be more trustworthy. When using quantitative and qualitative methods, the research can provide a range of answers and create interesting dialogues. As Leavy (2017: 19) states, "by using the two methods in an integrated way, you can learn comprehensively about the prevalence, context, and individual experience."

Just like in life, we all have our own lens to the world, and as you are reading this, you are adding your own interpretation to the research. I hope you, the reader, have found something valuable, or something thought provoking to make this a meaningful experience for yourself.

As last words, I want to say thank you.

The inspiring CRASH community.

The collaborating kindergarten's educators, and the children.

My husband, and my daughters.

Thank you!

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# **Appendices**

Tutkittavan suostumuslomake

#### Tutkimuksen nimi:

Tulevaisuuden hymyt – Suun terveyden edistämistä taiteen menetelmin esikouluikäisille lapsille.

Smiles for the Future – Oral Health Promotion with Creativity-Based Approaches for Preschool Children.

Tutkimuksen toteuttaja: Metropolia Ammattikorkeakoulu,

Jonna Kultanen, puh. xxxxxxxxxx, s-posti x.x@xxx.xx

Opinnäytetyön ohjaaja: XX, s-posti x.x@xxx.xx

Lastanne on pyydetty osallistumaan yllä mainittuun tutkimukseen, jonka tarkoituksena on tarjota esikoululaisille luova työpaja, jossa käsitellään suun terveyttä taiteellisten menetelmien kautta. Opinnäytetyössä käsitellään esikoululaisten suhtautumista työpajan aiheisiin ja harjoituksiin.

Olen saanut tiedotteen tutkimuksesta ja ymmärtänyt sen. Tiedotteesta olen saanut riittävän selvityksen tutkimuksesta, sen tarkoituksesta ja toteutuksesta, oikeuksistani sekä tutkimuksen mahdollisesti liittyvistä hyödyistä ja riskeistä. Minulla on ollut mahdollisuus esittää kysymyksiä ja olen saanut riittävän vastauksen kaikkiin tutkimusta koskeviin kysymyksiini.

Olen saanut tiedot tutkimukseen mahdollisesti liittyvästä henkilötietojen keräämisestä, käsittelystä ja luovuttamisesta ja minun on ollut mahdollista tutustua tutkimuksen tietosuojaselosteeseen.

Osallistun tutkimukseen vapaaehtoisesti. Minua ei ole painostettu eikä houkuteltu osallistumaan tutkimukseen.

Minulla on ollut riittävästi aikaa harkita osallistumistani tutkimukseen.

Ymmärrän, että osallistumiseni on vapaaehtoista ja että voin peruuttaa tämän suostumukseni koska tahansa syytä ilmoittamatta. Olen tietoinen siitä, että mikäli keskeytän tutkimuksen tai peruutan suostumuksen, minusta keskeyttämiseen ja suostumuksen peruuttamiseen mennessä kerättyjä tietoja ja näytteitä voidaan käyttää osana tutkimusaineistoa.

Allekirjoituksellani vahvistan lapseni puolesta osallistumisen tähän tutkimukseen.

Jos tutkimukseen liittyvien henkilötietojen käsittelyperusteena on suostumus, vahvistan allekirjoituksellani suostumukseni myös lapseni henkilötietojen käsittelyyn. Minulla on oikeus peruuttaa suostumukseni tietosuojaselosteessa kuvatulla tavalla.

Lapsen nimi:	 
Allekirjoitus:	 
Nimenselvennys:	 
Aika ja paikka:	 

Alkuperäinen allekirjoitettu tutkittavan suostumus sekä kopio tutkimustiedotteesta liitteineen jäävät tutkijan arkistoon.

### Tutkittavan informointilomake

#### TIEDOTE TUTKIMUKSESTA

Tulevaisuuden hymyt – Suun terveyden edistämistä taiteen menetelmin esikouluikäisille lapsille.

Smiles for the Future – Oral Health Promotion with Creativity-Based Approaches for Preschool Children.

## Pyyntö osallistua tutkimukseen

Lastanne pyydetään mukaan tutkimukseen, jossa tarkoituksena on tarjota luova työpaja, jossa käsitellään suun terveyttä taiteellisten menetelmien kautta. Tutkimuksessa tutkitaan esikoululaisten suhtautumista työpajan aiheeseen ja harjoituksiin.

Olemme arvioineet, että lapsenne soveltuu tutkimukseen, koska lapsenne käy esikoulua XXX päiväkodissa, XXX ryhmässä.

Tämä tiedote kuvaa tutkimusta ja lapsenne osuuttanne siinä. Perehdyttyänne tähän tiedotteeseen teille järjestetään mahdollisuus esittää kysymyksiä tutkimuksesta, jonka jälkeen teiltä pyydetään suostumus tutkimukseen osallistumisesta.

#### Vapaaehtoisuus

Tutkimukseen osallistuminen on täysin vapaaehtoista. Kieltäytyminen ei vaikuta kohteluunne tai lapsenne hoitoon päiväkodissa.

Voitte myös keskeyttää tutkimuksen koska tahansa syytä ilmoittamatta. Mikäli keskeytätte tutkimuksen tai peruutatte suostumuksen, teistä keskeyttämiseen ja suostumuksen peruuttamiseen mennessä kerättyjä havaintoja voidaan käyttää osana tutkimusaineistoa.

#### Tutkimuksen tarkoitus

Tämän tutkimuksen tarkoituksena on tarjota lapsille suun terveyteen liittyvä kokemus taiteen menetelmin, joka voi vähentää hammashoitoon liittyviä pelkoja tai jännitystä ja jopa motivoida suuhygieniasta huolehtimiseen. Esikouluikäisillä lapsilla pysyvät hampaat alkavat puhkeamaan ja niinpä on hyvä aika oppia ja käsitellä suun terveyttä. Taidelähtöisten menetelmien käytöllä on tarkoitus tehdä aiheesta helposti lähestyttävä kokemus lapsille. Opinnäytetyössä käsitellään lasten asenteita, ymmärrystä ja kokemuksia suun

Tutkimus on osa YAMK opinnäytetyötä.

terveyteen ja taiteen menetelmiin.

#### Tutkimuksen toteuttaja

Tutkimuksen toteuttaa suuhygienisti Jonna Kultanen, Metropolia amk opiskelija, osana ylemmän amk:n tutkintoa: Luovuus ja taiteet sosiaali- ja terveysaloilla.

## Tutkimusmenetelmät ja toimenpiteet

Tutkimuksen tutkittava ryhmä on esikouluikäiset lapset. Lasten oletetaan osallistuvan noin tunnin kestoiseen työpajaan esikoulupäivänsä aikana. Työpajassa pääasiallinen menetelmä on kuvataide. Tulemme todennäköisesti maalaamaan ja/tai piirtämään ja/tai värittämään, käyttämään valmiita kuvia ja käsittelemään aihetta tarinan kautta. Lapsilta ei odoteta ennakkoon valmistautumista, mutta toivotaan heidän osallistuvan avoimin mielin.

Työpajan pitää tutkimuksen toteuttaja, suuhygienisti Jonna Kultanen, joka havainnoi lapsia, keskustelee heidän kanssaan ja tarkastelee lasten tuottamia kuvataiteen luomuksia.

Paikalla on myös lasten varhaiskasvatus henkilökuntaa.

Työpaja kuvataan, mutta videotallennetta ei julkaista missään. Videotallennetta käytetään työpajan reflektointiin raporttia kirjoitettaessa.

Työpajan tuotoksista otetaan valokuvia, joita käytetään sekä reflektointiin, että työpajan havainnollistamiseen. Valokuvia saatetaan siis julkaista tutkimuksen raportoinnissa sekä esittelyssä, mutta osallistujien kasvot eivät tule niissä näkymään.

Tutkimus toteutetaan siten, että esiin nostetaan työpajan aikana tutkimuksen kannalta merkittäväksi koetut hetket.

## Tutkimuksesta mahdollisesti seuraavat haitat ja epämukavuudet

Suun terveyteen tai suun terveydenhuoltoon voi liittyä pelkoa ja jännitystä. Tutkimuksessa ei ole tarkoitus nostaa näitä pelkoja esille, mutta tarpeen mukaan niitä voidaan käsitellä. On tärkeä ymmärtää, että hammashoidon tarkoitus on edistää hyvinvointia, ei pelotella tai aiheuttaa kipua.

## Kustannukset ja niiden korvaaminen

Tutkimukseen osallistuminen ei maksa teille mitään. Osallistumisesta ei myöskään makseta erillistä korvausta.

## Tutkittavien vakuutusturva

Päiväkodin vakuutus on normaalisti voimassa työpajan aikana.

## Tutkimustuloksista tiedottaminen

Tutkimustuloksista ei tiedoteta erikseen.

Tutkimus on opinnäytetyö, joka julkaistaan avoimesti Theseus-tietokannassa. Osallistujat saavat pitää työpajassa toteuttamansa työnsä. Mikäli työpaja herättää kysymyksiä tai siitä haluaa kuulla enemmän, voi palautetta kysyä suoraan tutkimuksen toteuttajalta, suuhygienisti Jonna Kultaselta. Yhteydenotot sähköpostitse x.x.@xxx.xx tai puhelimitse xxx-xxxxxxx.

## Tutkimuksen päättyminen

Myös tutkimuksen suorittaja voi keskeyttää tutkimuksen, mikäli sen toteuttaminen ei ole mahdollista esimerkiksi aikataulullisista tai käytännönjärjestelyllisistä syistä riippuen.

#### Lisätiedot

Pyydämme teitä tarvittaessa esittämään tutkimukseen liittyviä kysymyksiä tutkijalle/tutkimuksesta vastaavalle henkilölle.

# Tutkijoiden yhteystiedot

Tutkija / opinnäytetyötekijä Nimi: Jonna Kultanen

Puh. XXX

Sähköposti: XXX

Tutkimuksesta vastaa / opinnäytetyön ohjaaja

Titteli: XXX Nimi: XXX

Sähköposti: XXX

## Tutkimuksen tietosuojaseloste: Henkilötietojen käsittely tutkimuksessa

Tässä tutkimuksessa käsitellään teitä koskevia henkilötietoja voimassa olevan tietosuojalainsäädännön (EU:n yleinen tietosuoja-astus, 679/2016, ja voimassa oleva kansallinen lainsäädäntö) mukaisesti. Seuraavassa kuvataan henkilötietojen käsittelyyn liittyvät asiat.

## Tutkimuksen rekisterinpitäjä

Rekisterinpitäjällä tarkoitetaan tahoa, joka yksin tai yhdessä toisten kanssa määrittelee henkilötietojen käsittelyn tarkoitukset ja keinot. Rekisterinpitäjä voi olla korkeakoulu, toimeksiantaja, muu yhteistyötaho, opinnäytetyöntekijä tai jotkut edellä mainituista yhdessä (esim. korkeakoulu ja opinnäytetyöntekijä yhdessä).

Tässä tutkimuksessa henkilötietojen rekisterinpitäjä on:

Korkeakoulu	$\boxtimes$	
Toimeksiantaja		Toimeksiantajan nimi:
Muu yhteistyötaho		Yhteistyötahon nimi:
Opinnäytetyöntekijä	$\boxtimes$	

# Voitte kysyä lisätietoja henkilötietojenne käsittelystä rekisteripitäjän yhteyshenkilöltä

Rekisterinpitäjän yhteyshenkilön nimi: XXX

Organisaatio: XXX

Puh. XXX

Sähköposti: XXX

## Tutkimuksessa teistä kerätään seuraavia henkilötietoja

Henkilötietojen käsittely on oikeutettua ainoastaan silloin, kun se on tutkimukselle välttämätöntä. Kerättävät henkilötiedot on minimoitava, niitä ei saa kerätä tarpeettomasti tai varmuuden vuoksi.

Tutkimuslupalomakkeet. Videotallenne työpajasta. Teillä ei ole sopimukseen tai lakisääteiseen tehtävään perustuvaa velvollisuutta toimittaa henkilötietojanne vaan osallistuminen on täysin vapaaehtoista.

## Tutkimuksessa kerätään henkilötietojanne myös seuraavista lähteistä

Tutkimuksessa ei kerätä henkilötietojanne muista lähteistä.

## Henkilötietojenne suojausperiaatteet

Tutkittavan suostumuslomakkeella huoltaja antaa lapsellensa luvan osallistua tutkimukseen.

Työpajasta kuvataan videotallenne, joka säilytetään ulkoisella kovalevyllä, joka on suojattu käyttäjätunnuksella ja salasanalla.

Henkilötietoja ei tallenneta järjestelmään.

Tutkimukseen sisältyvä materiaali hävitetään soveltuvin osin vuoteen 2024 mennessä.

### Henkilötietojenne käsittelyperuste

Suostumus.

## Tutkimuksen kestoaika (henkilötietojenne käsittelyaika)

Tutkimus kestää 31.12.2024 asti.

## Mitä henkilötiedoillenne tapahtuu tutkimuksen päätyttyä?

Tutkimuksen päätyttyä henkilötiedot hävitetään vuonna 2024.

#### Rekisteröitynä teillä on oikeus

Koska henkilötietojanne käsitellään tässä tutkimuksessa, niin olette rekisteröity tutkimuksen aikana muodostuvassa henkilörekisterissä. Rekisteröitynä teillä on oikeus:

- saada informaatiota henkilötietojen käsittelystä
- tarkastaa itseänne koskevat tiedot
- oikaista tietojanne
- poistaa tietonne (esim. jos peruutatte antamanne suostumuksen)
- peruuttaa antamanne henkilötietojen käsittelyä koskeva suostumus
- rajoittaa tietojenne käsittelyä
- rekisterinpitäjän ilmoitusvelvollisuus henkilötietojen oikaisusta, poistosta tai käsittelyn rajoittamisesta
- siirtää tietonne järjestelmästä toiseen

- sallia automaattinen päätöksenteko nimenomaisella suostumuksellanne
- tehdä valitus tietosuojavaltuutetun toimistoon, jos katsotte, että henkilötietojanne on käsitelty tietosuojalainsäädännön vastaisesti

Jos henkilötietojen käsittely tutkimuksessa ei edellytä rekisteröidyn tunnistamista ilman lisätietoja eikä rekisterinpitäjä pysty tunnistamaan rekisteröityä, niin oikeutta tietojen tarkastamiseen, oikaisuun, poistoon, käsittelyn rajoittamiseen, ilmoitusvelvollisuuteen ja siirtämiseen ei sovelleta.

Voitte käyttää oikeuksianne ottamalla yhteyttä rekisterinpitäjään.

# Tutkimuksessa kerättyjä henkilötietoja ei käytetä profilointiin tai automaattiseen päätöksentekoon

# Henkilötietojen käsittely aineistoa analysoitaessa ja tutkimuksen tuloksia raportoitaessa

Teistä kerättyä tietoa ja tutkimusaineistoa käsitellään luottamuksellisesti lainsäädännön edellyttämällä tavalla. Yksittäisille tutkittavalle annetaan tunnuskoodi ja häntä koskevat tiedot säilytetään koodattuina tutkimusaineistossa. Aineisto analysoidaan koodattuna ja tulokset raportoidaan ryhmätasolla, jolloin yksittäinen henkilö ei ole tunnistettavissa ilman koodiavainta. Koodiavainta, jonka avulla yksittäisen tutkittavan tiedot ja tulokset voidaan tunnistaa, säilyttävät Jonna Kultanen eikä tietoja anneta tutkimuksen ulkopuolisille henkilöille. Lopulliset tutkimustulokset raportoidaan ryhmätasolla eikä yksittäisten tutkittavien tunnistaminen ole mahdollista.

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# Sopimus opinnäyteyhteistyöstä

# 1. Sopijapuolet

hteistyötaho (jäljempänä "yhteistyötaho")
hteistyötahon nimi:
soite ja Y-tunnus: ; ja
detropolia Ammattikorkeakoulu (jäljempänä "Metropolia"), Y-tunnus: XXX, osoite; ja
detropolia Ammattikorkeakoulun opiskelija, joka on nimetty tämän sopimuksen allekirjoitusosiossa, ja oka on allekirjoittanut tämän sopimuksen (jäljempänä "opiskelija"); ja
detropolia Ammattikorkeakoulun puolesta opinnäyteyhteistyötä ohjaava henkilö, joka on nimetty imän sopimuksen allekirjoitusosiossa, ja joka on allekirjoittanut tämän sopimuksen (jäljempänä ohjaaja")
. Sopimuksen voimassaoloaika
opimus tulee voimaan viimeisestä allekirjoituksesta ja on voimassa projektin alkamisesta se äättymispäivään saakka.
Opinnäyteyhteistyö alkaa <u>, , .</u> Opinnäyteyhteistyö päättyy <u>, , .</u>

# 3. Sopimuksen kohde ja tarkoitus

Sopimuksen kohteena on opinnäyteyhteistyö opintoihin liittyvä projekti.

Opinnäyteyhteistyön nimi: <u>Tulevaisuuden hymyt – Suun terveyden edistämistä taiteen menetelmin esikouluikäisille lapsille</u> (<u>Smiles for the Future – Oral Health Promotion with Creativity-Based Approaches for Preschool Children).</u>

Opinnäyteyhteistyön tarkoituksena on:

Tarkoituksena on luoda luova työpaja, jossa käsitellään suun terveyttä taiteellisten menetelmien kautta. Tavoitteena on tarjota lapsille mukava kokemus suuhygieniaan ja hammashoitoon liittyvästä opetuksellisesta työpajasta käyttäen muun muassa kuvataiteen menetelmiä.

Tutkimuksessa tutkitaan esikoululaisten suhtautumista suun terveyteen ja taiteen menetelmiin.

# 4. Toteutussuunnitelma ja aikataulu

Opinnäyteyhteistyön sisältö ja aikataulu on kuvattu tässä ja tarvittaessa tarkennettu liitteessä 1:

Opinnäytetyön työpajaosuus, yhteistyössä XXX kaupungin varhaiskasvatuksen, XXX päivähoidon, XXX esikouluryhmän kanssa, toteutetaan kevään 2023 aikana. Opiskelija jatkaa opinnäytetyön reflektointia ja kirjoittamista syksyn 2023 aikana.

Tutkimuksen tutkittava ryhmä on esikouluikäiset lapset. Lasten oletetaan osallistuvan noin tunnin kestoiseen työpajaan esikoulupäivänsä aikana, noin 5–6 lasta per ryhmä. Työpajassa pääasiallinen menetelmä on kuvataide. Tulemme todennäköisesti maalaamaan ja/tai piirtämään ja/tai värittämään, käyttämään valmiita kuvia ja käsittelemään aihetta tarinan kautta. Lapsilta ei odoteta ennakkoon valmistautumista, mutta heidän toivotaan osallistuvan avoimin mielin.

Työpajan pitää tutkimuksen toteuttaja, suuhygienisti Jonna Kultanen, joka havainnoi lapsia, keskustelee heidän kanssaan ja tarkastelee lasten tuottamia kuvataiteen luomuksia. Paikalla on myös lasten varhaiskasvatus henkilökuntaa.

Työpaja kuvataan, mutta videotallennetta ei julkaista missään. Videotallennetta käytetään työpajan reflektointiin raporttia kirjoitettaessa.

Työpajan tuotoksista otetaan valokuvia, joita käytetään sekä reflektointiin, että työpajan havainnollistamiseen. Valokuvia saatetaan siis julkaista tutkimuksen raportoinnissa sekä esittelyssä, mutta osallistujien kasvot eivät tule niissä näkymään.

Tutkimus toteutetaan siten, että esiin nostetaan työpajan aikana tutkimuksen kannalta merkittäväksi koetut hetket.

# 5. Opinnäyteyhteistyön ohjaus

Yhteistyötahon p	puolelta Opinnäyteyhteistyötä ohjaa
Nimi:	<u> </u>
Asema:	
Nimi: Asema:	attikorkeakoulun puolelta Opinnäyteyhteistyötä ohjaa ja valvoo
esikouluryhmär Työpajan toteu	työpaja toteutetaan yhteistyötahon, XXX päiväkodin, esikouluryhmän tiloissa, n lapsille. ttaa Metropolia amk:n opiskelija, suuhygienisti Jonna Kultanen, joka toteuttaa ä lehtori X:n ohjauksen alla.

# 6. Henkilötietojen rekisterinpitäjä ja rekisterinpitäjävastuu

Rekisterinpitäjällä tarkoitetaan tahoa, joka yksin tai yhdessä toisten kanssa määrittelee henkilötietojen käsittelyn tarkoitukset ja keinot. Rekisterinpitäjä voi olla Metropolia Ammattikorkeakoulu, toimeksiantajaorganisaatio, muu yhteistyötaho, opinnäytetyöntekijä tai jotkut edellä mainituista yhdessä (esim. Metropolia Ammattikorkeakoulu, toimeksiantajaorganisaatio ja opinnäytetyöntekijä yhdessä).

## 6.1 Rekisterinpitäjä/yhteisrekisterinpitäjät

Tässä Opinnäytetyöyhteistyössä/Projektissa käsiteltävien henkilötietojen käsittelyn tarkoituksen ja keinot (esim. työvälineet, joilla henkilötietoja käsitellään) määrittää [valitse jokin/jotkin seuraavista]:

Opiskelija (opinnäytetyöntekijä/projektin tekijä), Metropolia Ammattikorkeakoulu ja toimeksiantajaorganisaatio yhdessä. Opiskelija, Metropolia Ammattikorkeakoulu ja toimeksiantajaorganisaation (nimi) ovat tietosuojalainsäädännössä tarkoitettuja yhteisrekisterinpitäjiä. Yhteisrekisterinpitäjien tarkat vastuut ja velvollisuudet on kuvattu rekisteröidyille tietosuojaselosteessa.



## 6.2 Yhteisrekisterinpitäjien vastuut [tarvittaessa]

Jos kyseessä on EU:n yleisen tietosuoja-asetuksen artiklan 26 mukainen yhteisrekisteri, kuvaa tähän kunkin rekisterinpitäjän vastuut.

Vastuunjaossa tulee ilmetä ainakin seuraavat asiat:

Kuka vastaa henkilötietojen käsittelystä koko niiden elinkaaren ajan? (kuka päättää esim. henkilötietojen säilytysajasta ja kuka poistaa ne, kun säilytysaika on umpeutunut?)

Kuka valitsee/päättää henkilötietojen käsittelyssä käytettävistä työvälineistä (tietojärjestelmät/ohjelmistot)? Kuka vastaa henkilötietojen käsittelyssä käytettävien työvälineiden ja/tai tallennusalustojen tietoturvasta? Kuka laatii henkilötietojen käsittelysopimukset järjestelmäntoimittajien kanssa (GDPR:n artiklan 28 sopimus)? Muut asianmukaiset tekniset ja organisatoriset toimenpiteet?

Kuka vastaa rekisteröityjen oikeuksien toteuttamisesta?

Kuka vastaa rekisteröidyn informoinnista?

Kuka vastaa GDPR:n artiklan 14 mukaisesta rekisteröidyn informoinnista, jos/kun henkilötietoja ei ole saatu rekisteröidyltä itseltään? (jos tiedot saadaan vain rekisteröidyltä eli tutkittavalta itseltään, ei tätä kohtaa tarvitse huomioida)

Voitte kysyä lisätietoja henkilötietojenne käsittelystä rekisteripitäjän yhteyshenkilöltä

Jos opiskelija/Metropolia Ammattikorkeakoulu on yhtenäkin rekisterinpitäjänä, niin Metropoliarekisterinpitäjän yhteyshenkilön nimi on:

Metropolia Ammattikorkeakoulun tietosuojavastaava: XXX

Puhelin: XXX-XXXXXXX
Sähköposti: X.X@XXX.XX

## 7. Tulokset ja tulosten käyttöoikeudet

Yhteistyötaholle toimitetaan seuraavat Opinnäyteyhteistyön tulokset:

Tuloksia ei toimiteta.

## 8. Kustannukset

Yhteistyötaho korvaa Metropolialle seuraavat kustannukset:

Ei kustannettavaa.

Opintoihin liittyvä Opinnäyteyhteistyö/Projekti ei saa aiheuttaa ylimääräisiä kustannuksia Metropolialle. Tällä sopimuksella opiskelijalle/opiskelijoille ei synny työsuhdetta Metropolia Ammattikorkeakouluun eikä yhteistyötahoon.

### 10. Julkisuus

Opinnäyteyhteistyön/Projektin tuloksena syntyvät opinnäytetyöt ovat aina julkisia asiakirjoja ja ne toimitetaan Metropolia Ammattikorkeakoulun kirjastoon.

Yhteistyökumppanin edellytetään ilmoittavan tuloksien julkaisemisen yhteydessä, että tulokset on aikaansaatu Metropolia Ammattikorkeakoulun kanssa tehdyssä opiskelijayhteistyössä ja ilmoittaa tuloksen tekemiseen osallistuneiden opiskelijoiden ja ohjaajien nimet niin kuin hyvä tapa edellyttää (Tekijänoikeuslain 3§:n 1 momentti).

Metropolia Ammattikorkeakoulun nimen tai muun tunnuksen käyttö kaupallisiin tarkoituksiin ei ole sallittua ilman Metropolia Ammattikorkeakoulun kirjallista lupaa.

# 11. Vastuu ja vastuunrajoitus

Opiskelija sitoutuu työskentelemään tavoitteellisesti yhteistyötahon kanssa. Opiskelija noudattaa Opinnäyteyhteistyötä /Projektia tehdessään hyvän tutkimuskäytännön periaatetta ja alan ammattieettisiä ohjeita Metropolian ja yhteistyötahon ohjauksessa. Opiskelija ja Metropolia ei tietoisesti sisällytä Opinnäyteyhteistyön/Projektin tuloksiin kolmannen osapuolen immateriaalioikeuksin suojattua aineistoa (esim. toisen tekijänoikeuksin suojaama kuva, tietokoneohjelma/-koodi, teksti).

Opinnäyteyhteistyön/Projektin tulos toimitetaan sellaisena kuin se on. Opiskelija tai Metropolia ei anna tulokselle takuuta eikä vastaa sen soveltuvuudesta yhteistyötahon tarpeisiin.

Metropolia ei vastaa opiskelijan tämän sopimuksen mukaisen työn yhteydessä mahdollisesti aiheuttamista vahingoista. Opiskelija ja/tai Metropolia ei vastaa epäsuorasta tai välillisestä vahingosta, joka on aiheutunut tämän sopimuksen sopijapuolelle. Opiskelijan vastuu rajoittuu aina 1000 euroon ja Metropolian 5000 euroon. Sopijapuolet eivät vastaa toisen sopijapuolen ulkopuoliselle taholle aiheuttamasta vahingosta.

## 12. Sopimuksen siirtäminen, päättäminen ja ylivoimainen este

Sopimuksesta aiheutuvia oikeuksia ja velvollisuuksia ei voi siirtää kolmannelle osapuolelle ilman toisten sopijapuolten suostumusta. Sopimuksen voi siirtää ja purkaa kaikkien allekirjoittaneiden yhteisellä päätöksellä.

Opiskelija voi irtautua tästä sopimuksesta ilmoittamalla asiasta kirjallisesti sekä Metropolialle että yhteistyötaholle. Metropolia ja yhteistyötaho päättävät yhdessä sen, voidaanko työ toteuttaa suunnitellulla tavalla, joudutaanko sitä muuttamaan tai päättämään se ennenaikaisesti. Olennaiset muutokset tulee sopia kaikkien jäljelle jäävien sopijapuolien kesken.

Opinnäyteyhteistyön/Projektin suorittamiseen varattua aikaa voidaan pidentää ylivoimaisen esteen aiheuttaman viivästyksen vuoksi. Ylivoimaisena esteenä pidetään esimerkiksi sotaa, kapinaa, luonnonmullistusta, yleisen energianjakelun keskeytymistä, tulipaloa, lakkoa,

valtiovallan asettamaa oleellista rajoitusta Metropolian toiminnalle, saartoa tai muuta yhtä merkittävä ja sopijapuolista riippumatonta syytä.

Irtautumisesta, siirtämisestä, purkamisesta tai projektin muusta ennenaikaisesta päättämisestä huolimatta vastuuta salassapitoa koskevat säännökset jäävät voimaan. Myös tämän sopimuksen mukaiset immateriaalioikeuksien käyttöoikeudet toimitettuihin tuloksiin jäävät voimaan.

# 13. Riitojen ratkaisu

Tähän sopimukseen ja sen tulkintaan sovelletaan Suomen lakia. Sopimuksesta aiheutuvat erimielisyydet pyritään ensisijaisesti ratkaisemaan sopijapuolten välisin neuvotteluin. Jos sopijapuolten kesken ei päästä sopuun, asia ratkaistaan Helsingin käräjäoikeudessa.

# 14. Osapuolten allekirjoitukset

Tätä sopimusta on tehty kaksi saman sanaista kappaletta, yksi Metropolialle ja yksi yhteistyötaholle. Tämän sopimuksen allekirjoittaneet opiskelijat saavat halutessaan kopion tästä sopimuksesta.

XXX päiväkoti, XXX kaupunk	<u>ii:</u>	
Yhteistyötahon allekirjoitus:		
Nimen selvennys:		
Paikka ja Aika:		
Metropolia Ammattikorkeako	rulu.	
•	<u>uiu</u>	
Allekirjoitus:		
Nimenselvennys:		
Paikka ja Aika:		
Ohjaajan allekirjoitus:		
Nimenselvennys:		
Paikka ja Aika:		
Opiskelijan allekirjoitus:		
Nimenselvennys:		
Opiskelijanumero:		
Paikka ja Aika:		

Sopimuksen täyttöohjeet

YLEISTÄ: Sopimusta täydennetään vain puuttuvien tietojen osalta. Muiden sopimuskohtien muokkaamista on harkittava huolellisesti ja oltava tarvittaessa yhteydessä Metropolian Lakipalveluihin ja/tai TKI-kehityspalveluihin.

HUOM! Nämä sopimuksen täyttöohjeet eivät ole osa sopimusta eikä niitä tule liittää sopimukseen. Ne ovat vain ohjeita sopimuksen täyttämisen ohjaamiseksi.

#### 1. Sopijaosapuolet

Täydennä puuttuvat tiedot yhteistyötahosta.

#### 2. Sopimuksen voimassaoloaika

Täydennetään puuttuvat tiedot opinnäyteyhteistyön/projektin alkamis- ja päättymispäivästä. Päättymispäivä on se päivä, jona opinnäytetyön/projektin pitäisi viimeistään olla valmis.

#### 3. Sopimuksen kohde ja tarkoitus

Täydennä puuttuvat kohdat

#### 4. Toteutussuunnitelma ja aikataulu

Kuvaa lyhyesti opinnäyteyhteistyön/projektin toteutussuunnitelma (täydennä tarvittaessa erillisellä liitteellä). Mitä tarkemmin kuvaus on laadittu, sitä paremmin se ohjaa työskentelyä. Suunnitelma sisältää yleensä ainakin kuvauksen työstä ja aikataulusta. Esimerkiksi:

- opinnäyteyhteistyön/projektia koskevaan teoriaan perehtyminen (kuvataan mitä)
- aineiston keruu (kuvataan tarkoin mitä, missä, miten)
- muu yhteistyö, ohjaukset, konsultointi ym.
- opinnäyteyhteistyön/projektin tulosten esittäminen ja julkistaminen

#### 5. Opinnäyteyhteistyön/Projektin ohjaus

Nimeä tähän opinnäytetyötä /projektia ohjaavat henkilöt sekä Metropolian että yhteistyötahon puolelta. Voit myös kuvata tarkemmin yhteistyötahon ohjauksen sisällön (esim. tapaamiset).

#### 6. Henkilötietojen rekisterinpitäjä ja rekisterinpitäjävastuu

"Henkilötiedolla" tarkoitetaan kaikkia tunnistettuun tai tunnistettavissa olevaan luonnolliseen henkilöön, jäljempänä, liittyviä tietoja; tunnistettavissa olevana pidetään luonnollista henkilöä, joka voidaan suoraan tai epäsuorasti tunnistaa erityisesti tunnistetietojen, kuten nimen, henkilötunnuksen, sijaintitiedon, verkkotunnistetietojen taikka yhden tai useamman hänelle tunnusomaisen fyysisen, fysiologisen, geneettisen, psyykkisen, taloudellisen, kulttuurillisen tai sosiaalisen tekijän perusteella. Tieto on tunnisteellista, jos sen perusteella voidaan tunnistaa yksittäinen henkilö. Henkilötietoja voivat olla sekä "Suorat tunnisteet", "Vahvat epäsuorat tunnisteet" että "Välilliset/epäsuorat tunnisteet".

- "Suorat tunnisteet" ovat tietoja, jotka yksin riittävät tunnistamaan henkilön (nimi, henkilötunnus, nimen mukainen sähköpostiosoite, biometriset tunnisteet kuten kasvokuva, ääni, sormenjäljet, silmän iiris, kämmenen muoto, perinteinen allekirjoitus).
- "Vahvat/epäsuorat tunnisteet" ovat tietoja, joiden avulla henkilö voidaan tunnistaa kohtuullisen helposti (osoite, puhelinnumero, IP-osoite, opiskelijanumero, vakuutusnumero, tilinumero, tarkat vuosiansiot, rekisterinumero, harvinainen ammattinimike, harvinainen sairaus, annettu asema esim. puheenjohtajuus).
- "Välilliset/epäsuorat tunnisteet" ovat tietoja, jotka eivät ole yksin riittäviä henkilön tunnistamiseksi, mutta mahdollistavat tunnistamisen yhdistettyinä muihin tietoihin (sukupuoli, ikä, asuinkunta, ammatti, päivämäärä, syntymäaika, kuolinaika, tapahtumatapahtuma-aika).

"Henkilötietojen käsittelyllä" tarkoitetaan toimintoa tai toimintoja, joita kohdistetaan henkilötietoihin tai henkilötietoja sisältäviin tietojoukkoihin joko automaattista tietojenkäsittelyä käyttäen tai manuaalisesti, kuten tietojen keräämistä, tallentamista, järjestämistä, jäsentämistä, säilyttämistä, muokkaamista tai muuttamista, hakua, kyselyä, käyttöä, tietojen luovuttamista siirtämällä, levittämällä tai asettamalla ne muutoin saataville, tietojen yhteensovittamista tai yhdistämistä, rajoittamista, poistamista tai tuhoamista.

#### 7. Tulokset ja tulosten käyttöoikeudet

Luetteloi tai kuvaa ne asiat, jotka toimitat yhteistyötaholle (esim. esitys, juliste, raportti) ja niiden lukumäärä. Käyttöoikeuden antaminen immateriaalioikeuksiin

- valitse vaihtoehdoista sopivin. Ensimmäinen vaihtoehto antaa yhteistyötaholle laajimmat oikeudet ja viimeisin suppeimmat.
- ole yhteydessä Metropolian TKI-kehityspalveluihin, jos et löydä sopivaa vaihtoehtoa tai on epäselvää miten määrittelet annettavat oikeudet.

#### 8. Kustannukset

Kirjaa ne kustannukset, jotka yhteistyötaho korvaa Metropolialle. On myös sovittava, maksetaanko korvaukset laskua vastaan vai sopimuksen perusteella. Jos korvaukset maksetaan sopimuksen perusteella, on summa ja eräpäivä kirjattava sopimukseen.

On mahdollista, että yhteistyötaho ei maksa mitään palkkioita tai korvauksia.

#### 9. Salassapito

Valitse vaihtoehdoista sopivin. Ensimmäinen vaihtoehto on sopiva, jos työn yhteydessä ei ole tarvetta käsitellä salassa pidettävää tietoa.

10-13. Ota yhteys Metropolian TKI-kehityspalveluihin, jos on tarve tehdä muutoksia kohtiin 9-12.

#### 14. Allekirjoitukset

Sopimuksen allekirjoittajan on oltava Metropolian Ammattikorkeakoulun edustaja hankintavaltuuksiensa puitteissa. Ohjaaja, opiskelija ja yhteistyötaho allekirjoittavat omasta puolestaan.

Kiitoskirje

# Kiitos, kun esikoululaisesi sai osallistua suun terveyden työpajaan

Tämän viestin tarkoitus on kiittää teitä ja kertoa työpajastamme. Toivon, että tämä tukee keskusteluanne esikoululaisenne kanssa, mikäli työpaja on herättänyt ajatuksia tai kysymyksiä.

Aloitimme tutustumalla toisiimme erilaisten hymyjen kautta. Kaikki saivat valita kuvakorteista itselleen mieluisimman hymyilevän hahmon, joka esiteltiin samalla, kun kaikki esittelivät itsensä.

Minä olen siis suuhygienisti ja kerroin lapsille, että suuhygienistit tekevät muun muassa lasten suunterveystarkastuksia, opastavat suuhygieniassa, antavat terveysneuvontaa, poistavat hammaskiveä ja puhdistavat hampaita. Parasta työssäni ovat hymyt.

Jatkoimme esikoululaisten kanssa fiktiivisen tarinan parissa.

Tarinassa seikkailee karhu, jolla on hammassärkyä. Karhu yrittää suoriutua päivästään hammassärystä huolimatta, mutta lopulta menee tapaamaan jänistä, joka hoitaa metsäneläinten hampaita. Jänis löytää säryn syyn ja karhulle kokemus on lopulta helpottava ja mukava. Tarinan tarkoitus on luoda positiivinen kuva hammashoidosta ja madaltaa kynnystä hakeutua hammashoitoon tarvittaessa. Lapset piirsivät kuvan arvauksestaan kysymykseen "Mikä voi aiheuttaa särkyä suussa?"

Seuraavaksi harjoittelimme lasten kanssa hampaiden harjaamista mallileukojen avulla.

Noin 6-vuotiaalla motoriset kyvyt kehittyvät niin, että hampaiden harjaus alkaa sujua. 6-vuotias voi siis harjata hampaansa jo itse, mutta vanhemman tulee auttaa ja tarkistaa harjaustulos vielä noin 8-12vuotiaaksi asti.

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**Appendices** 

Harjausharjoittelun jälkeen siirryimme maalaamaan hammasharjoilla. Kaikki

saivat maalata taikataikinasta tehdyn hampaan (hampaassa on reikä, josta voi

halutessaan vaikka pujottaa narun ja tehdä kaulakorun).

Teimme lasten kanssa vielä teille huoltajille kortit, joihin kirjoitin lapsen terveiset

suun terveyden työpajastamme. Lapset saivat vielä halutessaan maalata korttiin

kuvan hammasharjoilla.

Toin lapsille vielä muutamia näytteitä:

Jordan lasten juniorhammastahnaa, jota suositellaan käytettävän 6-vuotiaasta

eteenpäin. Juniorhammastahnoissa fluoripitoisuus on 1450ppm (sama kuin

aikuisille suositelluissa hammastahnoissa).

Cloettan ksylitolipurukuminäyte ja ksylitolipastilliaski. Aterian jälkeen

nautittu ksylitoli ehkäisee happohyökkäystä.

Aurinkoista kevättä!

Ystävällisin terveisin,

Suuhygienisti

Jonna Kultanen

Early Cluster

# Early Cluster of Data Analysis in Chronological Order

Findings from the Introduction Activity

To start with the introduction activity, I had pictures of smiles of well-known children's fictional characters placed on the floor. Every time the group of children for the workshop approached, the pictures on the floor captured their attention immediately. Familiar characters were spotted, and it started conversation amongst the children. The same pattern was repeated in all the workshops; the children were excited to choose a picture, they made their decision quite quickly, and everyone chose a picture they liked. The children were also curious to see each other's picks, "Which one did you choose?"

As I started the introduction round, with my choice of a smiling picture and a little background information, I asked the children if they knew what a dental hygienist does. Amongst all the workshops there was only one participant, in the first group, that shared his thoughts, "Probably something to do with a dentist?". All the other children were quiet and maybe shook their heads. As I told the children about my profession, the children listened and paid attention on what I was telling. In the first workshop group bravely took part in the conversation and shared their thought on dental care. One of them told them would also brush their tongue when brushing her teeth, another had already had a tartar removal, and the children were very eager to talk about their toothpaste that they had at home.

All the children were happy to show their choice of a smiling picture and introduce themselves. "I like watching this", "I have watched that movie", "Me

too", "I like those too" were some of the comments heard as we went through everybody's pictures.

# Findings from the Storytime Activity

Next, we had a story, and I was pleased to hear that many of the children enjoyed stories. "Yay! I like stories", said one of the participantss in the second workshop. The props I used during the story were admired and caught the children's attention. A teddy bear, the main character, was carefully examined from its girly eyelashes down to its slightly differing paws. The bunny ears made the children laugh, and a participant with a smile on their face said, "I like bunnies", as soon as they saw them. A dental mirror made the children lean towards it to have a closer look at it, and the dental tweezer was recognized, as one of the participants noted "The dentist has similar tweezers."

In the fairly beginning of the story, I asked from the children, what to do if you have a toothache. At every workshop, I quickly got an answer: "They should go to the dentist". In the first workshop, there was a child worried that the toothache might be caused by caries, and in the third workshop a child reminded of the importance of brushing the teeth. All the children agreed that swimming (that represented something fun to do), eating, or sleeping would not take the toothache away.

The story included a task for the children to draw a picture of what they thought was causing the pain in the teeth. Many of the children needed more guidance to get started with drawing. "What was it?", "I do not remember what it was", "I can not draw", "Can I write it?" were questions that raised in the first two workshops. To get everybody started with drawing, we had conversations about possible causes of toothache, but I also tried to highlight that there was no right or wrong answer to this task. The discussion made the children share some of the possibilities they came up with for toothache; "There may be tooth trolls",

"There's something in between (the teeth)", "A tooth might wiggle", "Maybe she ate too much, and they (the teeth) have started to ache".

With the first group we discussed tooth trolls and caries, tartar, and a blueberry rind between the teeth. As we went through the pictures these same themes were found from the pictures the children had drawn. One of the children even cheerfully noted to the one sitting next to her that, "Apparently we got the same ones". With the second group the discussion was about a possible caries, tooth trolls, candy, and something that has stuck between the teeth. The pictures from the second group represented teeth with caries, teddy bear with caries, tooth trolls, and honey. The pictures from the third workshop were also results of the conversation, but this group got really excited about the idea of drawing a tooth troll. "I will draw a tooth troll as well", said a participant that got excited about the idea after hearing another child was going to draw one. So along lollipops, cavities, and piece of meat, everyone in the third group drew a tooth troll, or a group of tooth trolls.

In the end of the story the cause of the toothache for the bear was a mouse hibernating between the bear's teeth. This unexpected finding made the children smile and laugh, but it was also found a bit questionable for the children. "Except that mouse actually looks much bigger for that bear's mouth" said a participant after looking at the teddy bear and the stuffed mouse toy that I had as props for the story. After explaining that the bear in the story would actually be a lot bigger, they was content. In the end, we all agreed it had been a good idea that the bear had went to get help from the bunny, that took care of the forest animals' teeth.

# Findings from the Toothbrush Activities

The subject of brushing teeth brought up a lively conversation, as the children were eager to share about their toothbrushes. Four out of six children shared they had an electronic toothbrush in the first workshop. In both, the second and

third workshop, three out of six of the children also had an electronic toothbrush. "I have an electronic toothbrush and a normal toothbrush" told one of the participants, and "I have one that shows how long to brush. It has a penguin, and a kind of light. As long it blinks, you need to brush." Shared another one.

Permanent teeth, as well as loose teeth were another enthusiastic subject, as in every workshop, the children wanted to share what was going on in their mouth: "I've lost teeth, look!", "I have a loose tooth", "I have permanent teeth here and then one of my teeth is loose", "I have a crooked tooth, a permanent tooth." The stage of eruption of permanent teeth differed from each child: "I haven't lost any teeth yet", "I have two permanent teeth", "I have eight."

When asked, who had already brushed their own teeth, everybody in the first group raised their hands eagerly, and then the looked at each other to see what the others had replied. In both, the second and the third workshop, there were three children that shared, that they had already brushed their teeth occasionally independently. The conversations were constructive: "I, by myself, brush in the morning, but then mom and dad brush in the evening", "We have the same thing", "My dad and my mom brush my teeth, because I don't know how, yet."

During the second workshop, a member of the kindergarten staff brought up an important issue, that in the hectic mornings brushing teeth might be forgotten. Some of the children admitted, that they would leave their teeth without brushing in the mornings. This conversation brought a valuable chance to motivate and find ways for the children to brush their teeth in the mornings as well.

After showing with model teeth and talking about the right brushing method, all the children got to try brushing with model teeth. Teeth brushing skills varied amongst the children. Even though, everybody brushed while the others were

watching, it seemed as there was no pressure, and nobody judged anyone. I was the only one guiding and the children followed.

After brushing we continued with an activity with toothbrushes. This time the assignment was to paint a tooth made of magic dough with the toothbrushes, and that way practice using a toothbrush. This assignment was received with enthusiasm amongst the children: "It is quite funny to paint with a toothbrush", "Can I keep this (tooth made of magic dough)? Oh yeah!"

# Findings from the Greeting Card Activity

As we wrote greeting to the children's guardians, every child got to think about the activities we had done. Children's favourite activities varied in every workshop. All in all, five of the eighteen children wanted to tell about the introduction activity, where the children got to pick a picture of a smile for themselves, as their favourite part of the workshop. Three children said they liked practicing brushing with model teeth. There was a child that had enjoyed listening to the story of the bear with toothache, and two of the children had liked particularly the part of the story where they got to draw a picture of the cause of a toothache. Five children chose painting with toothbrushes as their favourite thing of the workshop. There was also a participant, that had enjoyed picking the picture of a smile, as well as painting with toothbrushes, and wanted to mention both for his guardians. And one of the participants could not decide on what was the best thing about the workshop, as they said, "Everything has been nice here".

The cover side of the greeting card for guardians provided space fort the children to paint a picture of their choice with a toothbrush. The pictures included hearts, rainbows, a toothbrush, an airplane, a windstorm, and a lot of teeth - in fact the participants of the third workshop decided all to paint a picture of a tooth.

# Findings from the Part with the Goodies to Take Home to

The children were excited to get something to take home to. "Those are my favourite gum" and "These are my favourites" were some of the expressions of enthusiasm, as I dug out the xylitol samples. At the kindergarten children were given xylitol after mealtimes, and they were familiar with the concept of xylitol being good for their teeth. "Even gum is good for the teeth" noted one of the participants as I distributed the samples for the children. Xylitol was received as a treat amongst the children, and it was nice to be able to thank the children with "So many goodies" as one of the happy participants stated with all the samples in her hands.

Some of the children already used a junior toothpaste and were familiar with the sample. "I've had the same toothpaste" said one of the participants. As I told the junior toothpaste has as much fluoride as the adults' regular toothpaste, it aroused a doubt if the toothpaste would taste strong. "Is it strong?" asked one of the participants in the first workshop, and together we looked u the flavour that was described as "mild fruity".

There was quite a lot of samples and artwork for the participants to take home to. "I can't hold all of this in my hands" said one of the participants while trying to carry all the stuff to his locker. "We got this much" said another participant, and I smiled as I thought the children had given me so much to take home to as well.