NATUREACH

# Workshop 1: Virtual nature interventions, Umeå 22-03-30

## Short summary from Group discussion session

The workshop gathered experts in social and health care, film, VR- and digital technology and multidisciplinary research to discuss virtual nature interventions from client perspective. One of the things on the agenda was a group discussion (paralleled with a session of testing of VR-glasses). With the aid of some questions, 3 groups discussed for one hour, the aim, purpose and design of virtual nature interventions in general and specifically for the different client groups of the project. The participants of the groups were selected to get a mix from different client groups, researchers etc.

### Notes from the 3 discussion groups

1. **What do you want to achieve with a VR intervention?** *Vad vill du/ni uppnå med en VR-intervention? Mitä virtuaaliluonnon interventioilla tavoitellaan?*

**Group 1**

- Psychiatric care: to reduce anxiety after meals, as one tool for making eating a bit easier to patients with an eating disorder
- Palliative care: to pain relief in many different levels, to have same kind of positive experiences that the patients have had earlier in real nature
- Österåsen: to stress management, to help maintaining the healthy routines, keep up the continuity
- Eskoo: to add quality of life
- Staff in all units: it could be a substitute for recovery in real nature for those who live in the city and have to travel outside the city to reach nature

**Group 2** (see summary below)

**Group 3**

- Different purposes in different client groups in the project
- Relaxation, well-beeing, “therapy”, sensory stimulation, increased mood, brain stimulation
- “Escape” from e.g. pain – good or bad? Both?

2. **What do you want to convey with a VR intervention?** *Vad är det du/ni vill förmedla med en VR-intervention? Mitä virtuaaliluonnon interventioilla halutaan välittää asiakkaalle/potilaalle?*

**Group 1**

- Palliative care: to have same kind of positive experiences that the patients have had earlier in nature
- Eskoo: to offer different experiences to the clients
- Psychiatric care: that there is something you can do with your anxiety, to encourage the patients to go out after their treatments in the hospital
- Österåsen: positive selfcare, to overcome the usual excuses, one more thing to continue with the change for better lifestyle

**Group 2** (see below)

**Group 3**

- Positive reactions from nature even if “negative” feelings can be positive if they are taken care of in

good way.
- Arousal of positive associations by e.g recognition

3. **How do you think a VR intervention should be to give the participant a feeling of being in nature, even though she/he is indoors?** *Hur tror du/ni att en VR-intervention ska vara för att den som deltar ska få en känsla av att vara i naturen, fastän man är inomhus? Millaisia VR interventioiden tulisi mielestänne olla, jotta osallistujalle syntyisi luontokokemus, vaikka hän tosiasiallisesti on sisätiloissa?*

**Group 1**
- Eskoo: for people with disabilities there could be more movement in the virtual nature interventions, the "still standing" video can be too boring or it should be shorter than the ones with more activities
- Psychiatric care: for some patients even virtual forest walks might work
- Staff/ people with stress related exhaustion disorder: in earlier research and interventions green nature, water elements, the overall view and a feeling of a shelter have been experienced positive; it would be good to have a variation with at least 5-6 different environments that people could choose to their interventions

**Group 2** (see below)

**Group 3**
- Possibility to look around, look at things both near and far away
- Sense of serenity with some possibility to follow movement with the eye but not too much
- Combine with other senses; smell, wind, sun etc

4. **When designing a VR intervention, what significance has different sensory impressions, the person's daily routine, background, habits or current situation or else?** *Vilken betydelse har t ex olika sinnesintryck, personens dagsform, bakgrund, vanor eller nuvarande situation för VR- interventionens utformning? Mitä merkitystä luontointerventiota suunniteltaessa on eri aistien huomioimisella, ihmisen päivittäisillä rutiineilla, taustatekijöillä, tottumuksilla tai esim. nykyisellä elämäntilanteella?*

**Group 1**
- Eskoo: also the other elements and senses that visual are important; the warmth of the sun, the scents, other nature elements etc. No VR glasses for our clients, and the dome should be installed in such a way that edges and equipment do not interfere with clients with autism.
- Psychiatric and palliative care: the VR-glasses should really fit very well and the glasses must not weigh on the head or feel uncomfortable because the patients are often very weak. For the patients with eating disorder the sound is important, but also the warmth is really important because the patients easily feel cold. Smells can easily be too heavy, and the taste cannot be within the interventions. For the patients in palliative care, the movement can cause nausea.
- Staff members: the interventions should be very simple to conduct during the breaks, for e.g. 10-15 minutes

**Group 2** (see below)

**Group 3**
- State of mind important for the balance between stillness/movement
- Early experiences can be both positive and negative
- Recognission, arouse associations – positive

5. **What do you think is most important to achieve a positive impact on a person in a VR intervention? Why is it important?** *Vad tror du/ni är det viktigaste i en VR-intervention (bild, ljud, andra sinnen, längd mm) för att den ska ha en positiv inverkan på en person? Varför är det viktigt? Mikä on mielestänne virtuaaliluonnon interventiossa tärkeintä, jotta asiakkaalle/potilaalle saataisiin syntymään positiivisia*

*vaikutuksia? Miksi mainitsemasi asia on tärkeä?*

**Group 1**

- Individualisation with a possibility to choose different kind of virtual environments, complemented with other senses than vision and audio. It will be interesting to see what is the relation between different film/environment types, does it vary and why? Is it possible to get the common preferences?

**Group 2** (see below)

**Group 3**

- Control over the situation, sense of being safe
- Not too much action
- Some action (not too still). Ideas for increased "action": Bird feeder, sunrise to sunset, ant hill, ants etc. plus leaf movement and waves. No sudden moose-apparences ☺!
- Camera not too low – sense of having no control and not too high (strange feeling if you are shorter)

6. **How can the entire intervention be designed to have the best effect (layout, information, introduction, instructions, etc.)** *Hur kan man utforma hela interventionen för att få bäst effekt (upplägg, information, introduktion, anvisningar mm) Miten luontointerventio tulisi suunnitella ja toteuttaa, jotta sillä saavutettaisiin mahdollisimman positiiviset vaikutukset? (suunnittelu, tiedotus, interventioiden esittely, ohjeet ja opastus jne.)*

**Group 1**

- It's good to notice that we probably never going to get the ideal intervention, but we have great possibilities to offer positive experiences when there are different options and elements "in the pocket" which can compensate the lack of real nature and support the patient/client concerning their different preferences, situations and mood -> the individualization

**Group 2** (see below)

**Group 3**

- The introduction is very important for the results, eg. breading exercise to catch negative emotions etc. This to get the right expectations.
- Long talk in the group about the importance of having the staff involved, engaged and informed. To have their own experience before and parallell to the client group.
- Maybe some possibility to catch negative emotions afterwards
- Possibility to share the experience with family afterwards (in some client groups) would be positive.

## Other things discussed in the groups:

**Group 1**

- The plan is to use Stress-energy-level evaluation to the staff, but do we need also other scales?

**Reactions to the dome-"films":**

**Group 3**

- Everybody liked the environment best with the tree hanging over the head, by the sea. Because: shelter, view, objects near, horizon, movement in leaves, in water. Nevertheless, one commented about the flickering light from the sun, can be too much if you e.g. have a headache.
- The film of a spring deciduous forest with flowers on the ground: Some felt "threatened" and vulnerable lying down with bare tree stems above

**Some reactions to VR-glasses experience:**

**Group 1**

- The attachment rims of the glasses should be as soft as possible for patients with eating disorders

**Group 3**

- The stems from the spring forest environment, not threatening,
- Strange to not see your feet, some experienced dizziness.

## Reflections/summary from the facilitators

**Group 1 (Martta)**

We had a very diverse discussion, as four different client pilots were represented, as well as occupational health experts. The main comments are documented on discussion questions, but one interesting overall idea came up at the end of our conversation: we are actually creating a new profession to the social and health care sector – a VR therapist, who have the knowledge and tools to optimize the positive effects for the clients using virtual nature.

**Group 2 (Ann)**

Different clients have different ideas of what kind of VR they need. Eskoo wants animals and nature and movement, Palliative calm nature, the eating disorder unit a little more experience, even suggests VR with food so that certain groups can be trained to approach the food. When it comes to glasses; the eating disorder unit believes glasses are too heavy if their patients are sitting or standing, they need to lie down to use them. In palliative care most of them are already lying down. Everyone agrees that glasses can induce dizziness and be dangerous for balance if you stand up. (In Eskoo they are only going to use dome)

The goal of VR is for Eskoo to give clients new experiences instead of white walls. They are not looking for recovery or stress reduction from what I understand. Palliative care wants stress reduction and "peace of mind" for its clients. The eating disorder unit, I think, if I understood correctly, wants to create distraction and non-negative experiences in very fragile and self-destructive people, i.e. those with anorexia. But also get the target group who are afraid and disgusted by food to approach it.

**Group 3 (Elisabet)**

The discussion in our group was mostly general and we didn´t so much discuss separate client groups. The discussion was mostly about how to introduce and follow up the virtual interventions to the clients, the importance of the knowledge and engagement from the staff and the interactions between clients, staff and family members. Furthermore we discussed how to construct the environments, above all the balance in the virtual environments between stillness and movement. We concluded that there should be a very moderate action but not too much. There should also be a possibility to choose between environments with different amounts of “action”, stillness and “shelter” according to the clients current mood, background etc. This also according to the different aims; relaxation, well-being, “therapy”, sensory stimulation etc.

## *Discussion GROUPS:*

**Group 1**
Facilitator: Martta Ylilauri (UVA)
Suvi Hopiavuori (Eskoo) Marita Niemelä (Psychiatric care), Lisbeth Slunga Järvholm (UmU), Anna María Palsdottír (SLU), Helena Ekegren Hällgren (Palliative care), Benno Krachler (Österåsen)

**Group 2**
Facilitator: Ann Dolling (SLU)
Johanna Mäki-Rautila (Eskoo), Sirpa Rentola (Eskoo), Hanne Ijäs (Psychiatric care), Hanna Suominen (Psychiatric care), Madelen Bodin (Curiosum, UmU), Sofia Persson (Palliative care), Charlotte Högberg (Österåsen)

**Group 3**
Facilitator: Elisabet Bohlin (SLU)
Maija Vuori (Psychiatric care), Monika Norberg, (UmU), Catharina Norberg (UmU), Johan Jirlén (LTU) Annika Kramer (Palliative care), Carina Nilsson (nature and health entrepreneur, Gällivare)

*Participated in some/several of the group discussions, VR-glass facilitation and/or film or programming discussions:*
Martin Gärdemalm (SLU, film production and coordination)
Esa Siltaloppi (entrepreneur, video production)
Antti Martikainen (Virtual-dawn, VR-tech)
Niko Ranta (Virtual dawn VR tech)
Karri Rintamaa (UVA, VR tech)
Jyri Nieminen (UVA, programming/VR)
Joonas Kangas (UVA, programming/VR