SAFE4CHILD

Official Newsletter of Safe4Child Project Vol. 2

Safe4Child - Trauma informed approaches to support staff working with children and adolescents exhibiting behaviors that challenge

LTT IN PLOVDIV IN OCT 2023

By Kostadin Kostadinov, MU Plovdiv

During the dates of October 10 to 12, 2023, MU-Plovdiv hosted a Learning, Teaching, and Training (LTT) meeting as part of the S4C project. Attendees from all partner countries of the project participated in the event. Each participant had the chance to engage with and provide feedback on the simulation scenarios developed by the project. This included testing and sharing their thoughts and expectations, as well as identifying any areas for improvement.

The VR testing phase involved not only project participants but also the academic staff from the Department of Medical Informatics and Biostatics at MU-Plovdiv, along with third-year nursing students. The meeting unfolded with productive discussions and thoughtful deliberations.

MU-Plovdiv and its partners organized a rich cultural program, with various events scheduled throughout each working day of the meeting. The outcomes and highlights of the meeting were documented on MU-Plovdiv's website, and all participants were honored with a certificate of participation.

TESTING THE VR APPLICATION IN BULGARIA

By Jami Aho, Turku UAS

In October 2023, the Finnish team had the chance to visit Plovdiv, Bulgaria, and test the VR application with partners from Bulgaria, Germany, Ireland. The testing session took place during one of the LTT meeting days. The partners came one by one to try out the VR application and experience the scenario with our frustrated, angry virtual child.

It was key to observe the partners' actions and reactions while they were using the VR application to gain an understanding of where better clarity needs to be added. Partners were also asked for feedback and suggestions on how to improve the usability and functionality of the VR application. After each partner had tested the VR application, they filled out a Likert questionnaire based on the 10 game usability heuristics (Pinelle et al., 2008).

The next day, we had another opportunity to test the VR application with a different group of users: students and staff from the Medical Faculty of Plovdiv University. Some more questionnaire responses were also collected here.

Improving the sounds of the VR application

One of the aspects of the VR application that needed more attention was the sound design. The sounds are essential to create an immersive and realistic VR experience, as well as to convey information and emotions to the users.

The voice lines for the characters were discussed during the meeting along with their script. The Irish team already produced a first iteration of the sounds during the trip, and we listened to it later that same day. It was just what we needed!

The new sounds included a voice for the main character in our scenario, Sebastian, who is a child that had gotten some bad news just earlier that day.

The sounds also included a voice for the nurse who communicates with you and the children. Additionally, the sounds included a narrator who provides some background information and instructions to the user. And the background sounds from other kids we got later from Team Germany. Sounds really help to add more depth and realism to the VR application.

Work continues after the trip

After the trip to Bulgaria, the Finnish team continued to work on the VR application and implement the usability ideas and improvements to the overall scenario that they had identified during the testing sessions. They also received the final version of the sounds from the Irish team and integration to the VR began.

Initially, the VR application was designed to run on PC-based VR-devices. However, these devices require a PC and a wired connection, which can limit the mobility and accessibility of the users. Therefore, it was decided to switch to standalone VR devices, such as the Meta Quest 2 (or Quest 3) which do not require a PC or a wired connection and are more user-friendly and affordable. This change required some adjustments and optimizations in the VR application, as well as a better usability design, so that the users can manage everything by themselves without external assistance.

We are now working on finalizing the VR application and preparing it for a final test with the Turku HEI teachers. After the final test, the finalized version of the VR application will be sent to the other project partners.

CURRICULUM DEVELOPMENT

By Astrid Jörns-Presentati and Gunter Groen, HAW Hamburg and
Maria O'Malley, University College Cork

Development of a blended-delivery course aimed to enable professionals working in Child and Adolescent Mental Health Inpatient Units, Residential Child Care Units, and Childrens in General Hospitals to develop a trauma informed approach to reduce restrictive practices, seclusion and restraint with children.

Globally it is estimated that one in six children between 10 to 19 years experience mental health challenges (Global Health Data Exchange, 2019). Many of these young people require formal support from health and social care services, services that are under strain because of numerous socio-economic issues. Staff working in these services report challenging environments including behaviours that challenge. The Safe4Child project aimed to develop a learning programme for staff to reduce restrictive practices that are used as staff attempt to manage these behaviours and reduce risk.

The curricular content for the programme was developed over two years among international teams from Ireland, Finland, Bulgaria and Germany, informed by principles of Trauma Informed Care. This online course is targeted at health and social care professionals comprising nurses, doctors (including psychiatrists), occupational therapists, social workers, psychologists and health care assistants. Content was based on a Systematic Review (Kelly et al., 2022), and a series of focus groups in the partner countries, as well as expert knowledge on CAMHS and Trauma Informed Care within the partner countries. The programme consists of five modules, four of which will be available asynchronously and a VR-based simulations to augment learning. Participants will be immersed in a VR environment to practice skills in de-escalation with a young person in distress. The delivery of this micro credential will be evaluated using research methodology. Qualitative data will be collected via semi-structured focus group virtual interviews with participants on completion of the course. Quantitative data will be collected pretest-posttest to examine participants attitudes to aggression, violence, and trauma-informed care. The usability of the VR-based simulation will also be measured with questionnaires.

"Using a trauma-informed approach with children that show behaviours that challenge plays a particularly important role in our inpatient facilities. We want to offer a place that is as safe as possible for both our clients and our staff. The practical de-escalation programme to be developed in the Safe4Child project can help us to do this. We are delighted that some of our new employees will be able to participate in the testing, evaluation and further development of the training programme."
Lars Dierking, Gangway (Residential Care Unit Manager, Hamburg, Germany)

SIMULATION

By Ville Vainio and Satu Haapalainen,Turku UAS

Simulation means imitating a real situation. In nursing, simulation education is a bridge between classroom learning and real-life clinical experience. Simulations are not only used in basic nursing education, but often also those, who already are in working life, practice their skills in a diverse way through simulation in continuing education.

Simulation learning provides plenty of opportunities for learning and practicing different skills. We are talking about so-called technical skills (manual skills) and non-technical skills (e.g.decision-making and problem-solving and team work). Different simulation environments and different simulation cases enable simulations to be used as a learning method anywhere.

Simulation learning can be divided also in different levels. In low level simulation student can practice one small aspect of nursing work, for example giving an injection. In medium level student can apply previous knowledge and simulate slightly more challenging situations than in low-level simulations. In high level simulations students learn for example how to teamwork and how to make decision in difficult situations. In high level simulations the targeted learning outcome is the ability to transfer what is learned through simulation to a practical situation when treating real patients. In the S4C project we have developed a virtual simulation session which can be defined as a high level learning experience.

Advanced human patient simulator (HPS) manikins have been used for years in simulation situations with the most advanced versions of the manikins talking, turning heads, expressing some facial expressions and, for example, measuring all vital organ functions. In psychiatric nursing, the use of a human patient simulator (HPS) has not been justified, as the amount of information collected about the patient is usually based on behavior, facial expressions, movements, tone of voice, etc. Students, who act patients, have often been used in psychiatric simulations, but in child psychiatric care it is not possible to practice challenging situations with real children and therefore virtual reality offers the possibility to train authentic-like situations with virtual child patients.

In the S4C project, we ended up implementing a virtual simulation session for child psychiatry nursing education, as the virtual simulation situation helps the student prepare for a real similar situation in advance and practice a challenging situation. The advantage of simulation is an opportunity to make mistakes, and the purpose of the learning discussion afterwards

(debriefing) is to learn about the mistakes also and for example to discuss alternative ways of acting in the situation, find different solutions. The student learns to reflect on their own actions through discussion and learn to give and get feedback.

In the virtual world, we are not yet able to do all the same as when simulating with acting patients or HPS manikins, for example, and the problems here are mainly related to communication and body movements. However, future VR simulations will be more and more like real life and an increasingly integral part of nursing education.

References:

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UPDATE- STEPS TO PILOTING PHASE

By Satu Haapalainen, Turku UAS

One purpose of the Safe4Child project is to evaluate the effectiveness and usefulness of an e-learning environment and its virtual reality (VR) case studies in strengthening the skills of child challenging behavior management for professionals and students working in child psychiatry departments and child protection units. The project started on 1st of February 2022 and we are now at the stage where the VR scenario and the online course are starting to be ready for piloting. The online course and VR piloting will take about 3 months, from January to March 2024. During this period, 30 participants from each country (altogether 120) will take part in a survey to assess the functionality and usability of the VR technology. Pre and post surveys will also be used to assess respondents' attitudes on aggression management during the piloting phase. The survey is open to volunteers who work as a professional (nurse/supervisor/social worker) in child psychiatry and child protection services and for nursing students.

The piloting phase will provide valuable information on both the online course and the VR simulation. The information we collect during this phase will help us to complete the course package for use.

Safe4Child will have many impacts and by involving several frontline workers who work with children and nursing students, in different phases of the project, we increase both the tangibility and visibility of the project.

The expected impact for the project's target group (frontline workers and nursing students) will be:
• Raising awareness on aggressive and violent behavior of children and adolescents and the establishment of knowledge of the causes and management (including prevention) of aggressive and violent behavior
• Creation of useful learning contents that will improve the quality and interventions provided
• Increased skills, competences and knowledge enhancing front line workers occupational wellbeing and safety and ability to work.
• In addition, impact will be on the development of crucial networks with other workers (nationally and across Europe) in similar social health care frontline professionals to share knowledge and experiences in the field of managing child and adolescent violent behavior.
• Using the Safe4Child on-line platform will have a great short-term impact on skills levels of frontline workers and nursing students

After the pilot phase and the completing the course, we will have a 5-credit package:
"Safe4Child-trauma focus care for managing behavior that challenges among children", including VR simulation: "to develop trauma informed skills when interacting with children and adolescents who engage in behaviors that challenge".

Based on the results on previous phases, we will develop a course handbook to guide the teachers and course users to use the online course and VR simulation-based training activities. The course handbook should be completed in Spring 2024.

CONTACT US!

🌐 https://safe4child.turkuamk.fi/
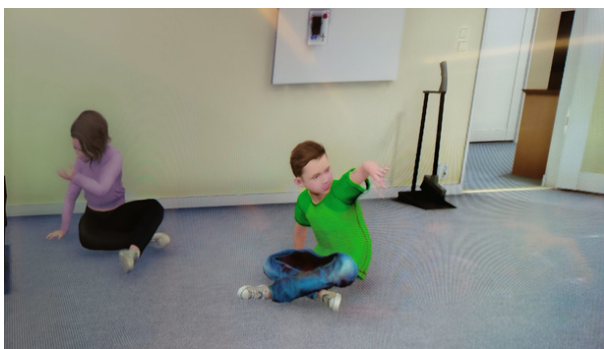
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