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Effectiveness of a virtual reality courtroom to support survivors of sexual violence

Submission date	Recruitment status	[X] Prospectively registered
28/05/2024	No longer recruiting	[_] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
28/05/2024	Ongoing	[_] Results
Last Edited	**Condition category**	[_] Individual participant data
06/12/2024	Other	[X] Record updated in last year

Plain English summary of protocol

Background and study aims
Research shows that survivors of sexual violence often experience distress when testifying in court, which can have an impact on their well-being and testimony in court. The purpose of this study is examine whether a virtual reality courtroom intervention is effective in alleviating distress that survivors associate with a courtroom.

Who can participate?
The study participants will be victims of sexual violence who are 18 years of age or older today, but the offense may have occurred at any time during their lifetime. We are looking for participants who have not testified in a court case where they themselves are the victims of a crime, but could possibly consider doing so in the future.

What does the study involve?
Participation in the study involves three aspects, attending twice at Reykjavík University at Menntaveg 1, 102 Reykjavík, and answering questionnaires via e-mail once. The first visit to Reykjavík University will probably take about 2 hours and the second about 45 minutes. On both of these occasions, participants will be asked to take a blood test within 24 hours. Answering the email questionnaire will take about 15 minutes. The participants will be divided into two groups, the second group will start by answering the questionnaires by e-mail and then will come to the place twice.

What are the possible benefits and risks of participating?
Participants will benefit from the study by getting a payment of 10 thousand ISK, in addition to contributing to increasing knowledge of the use of virtual reality to inform victims of sexual violence, reduce their anxiety and hopefully encourage them to seek justice. The most significant risk will be distress that participants may experience while in the virtual environment. Participants may take a break or stop participating at any time, and participants may withdraw their consent and request that their data be deleted, if it is not non-personally identifiable or has already become part of the results of the study. If participants become upset, they will be offered a session with a clinical psychologist, free of charge.

Where is the study run from?
The study is run from Reykjavik University in Iceland.

When is the study starting and how long is it expected to run for?
June 2021 to December 2025

Who is funding the study?
The study has been funded by the Icelandic Research Fund.

Who is the main contact?
The main contact person for the study is Dr. Rannveig Sigurvinsdóttir, associate professor of Psychology at Reykjavík University. To get in contact with her, please email rannveigs@ru.is

Study website
https://www.ru.is/rannsoknarsetur/domsalur-i-syndarveruleika

Contact information

Type(s)
Public, Scientific, Principal Investigator

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Additional identifiers

EudraCT/CTIS number
Nil known

IRAS number

ClinicalTrials.gov number
Nil known

Secondary identifying numbers
Icelandic Research Fund number 2106-0502

Study information

Scientific Title
Effectiveness of a virtual reality courtroom intervention among survivors of sexual violence to impact their distress, physiological stress responses, sense of control and attitudes towards going to court in real life

Study objectives
1. Among sexual violence survivors, feelings of perceived control, empowerment and attitudes towards going to court will improve as a result of the virtual courtroom intervention.
2. A waitlist control group will receive the virtual courtroom intervention 2 months after the experimental group, and then feelings of perceived control, empowerment and attitudes towards going to court will improve (but not beforehand).
3. The virtual reality courtroom will evoke stress reactions (distress and physiological stress responses) among survivors of sexual violence that then decrease over the course of one session.
4. At a follow-up session 2 months after the virtual courtroom intervention, participants will show a lower stress reaction and improved feelings of perceived control, empowerment and attitudes towards going to court.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 21/02/2024, Icelandic Bioethics Committee (Borgartun 21, Reykjavik, 105, Iceland; +354 551 7100; vsn@vsn.is), ref: VSN-20-061

Study design
Single-center interventional randomized controlled trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
University/medical school/dental school

Study type(s)
Treatment

Participant information sheet
https://www.ru.is/rannsoknarsetur/domsalur-i-syndarveruleika#upplysingabref

Health condition(s) or problem(s) studied
Distress associated with going to court for sexual violence survivors

Interventions
The experimental group will take part in a one-session virtual reality courtroom intervention, where distress, physiological stress reactions, feelings of empowerment and control and attitudes towards going to court will be measured. Two months later, participants will return for

a follow-up session to examine the same variables. Two months after that, participants will complete an online survey assessing their feelings of empowerment and control and attitudes towards going to court.

Participants will be randomized to an intervention or control group, where the control group will begin by answering the online survey, then followed by the virtual reality intervention two months later, and then the follow-up virtual reality session 2 months after that.

We will use an online randomization tool to form the experimental and control groups. We google random number generator and use that to give us either the number 1 or 2, and participants who get the number 1 will be part of the experimental group and those with the number 2 will be part of the control group.

Intervention Type
Behavioural

Primary outcome measure
1. Perceived control, empowerment and attitudes towards going to court will be measured using questionnaires developed by the researchers based on the current literature at baseline, 2 months later, and then 2 months after that.
2. Distress will be measured with the Subjective Units of Distress Scale at baseline, 2 months later, and then 2 months after that.
3. Physiological stress reactions measured will be heart rate, eye movements and skin conductance, measured directly by technology worn by participants at the virtual reality courtroom intervention and follow-up sessions.

Secondary outcome measures
1. Depression, Anxiety and Stress measured using the Depression, Anxiety and Stress Scales at baseline, two months later and then two months after that.
2. Post-traumatic stress disorder measured using the PTSD Checklist for DSM-5 at baseline, two months later and then two months after that.

Overall study start date
15/06/2021

Completion date
31/12/2025

Eligibility

Key inclusion criteria
1. Being a survivor of sexual violence
2. Being at least 18 years of age
3. Having not gone to court in real life in a case where they were the victim of a sexual crime

Participant type(s)
Healthy volunteer

Age group
Adult

Lower age limit
18 Years

Upper age limit
100 Years

Sex
Both

Target number of participants
60

Key exclusion criteria
1. Being under the age of 18 years
2. Not having experienced sexual violence
3. Having been to court in real life when testifying in a case where they were victimized

Date of first enrolment
30/05/2024

Date of final enrolment
30/05/2025

Locations

Countries of recruitment
Iceland

Study participating centre
Reykjavik University
Menntavegur 1
Reykjavik
Iceland
105

Sponsor information

Organisation
Reykjavík University

Sponsor details
Menntavegur 1
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+354 5996200
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Sponsor type
University/education

Website
www.ru.is

ROR
https://ror.org/05d2kyx68

Funder(s)

Funder type
Government

Funder Name
Icelandic Research Fund

Results and Publications

Publication and dissemination plan
We plan to publish the results in peer-reviewed journals.

Intention to publish date
31/12/2025

Individual participant data (IPD) sharing plan
We do not intend to make the data publicly available in order to protect survivor identity and experiences.

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet			28/05/2024	No	Yes