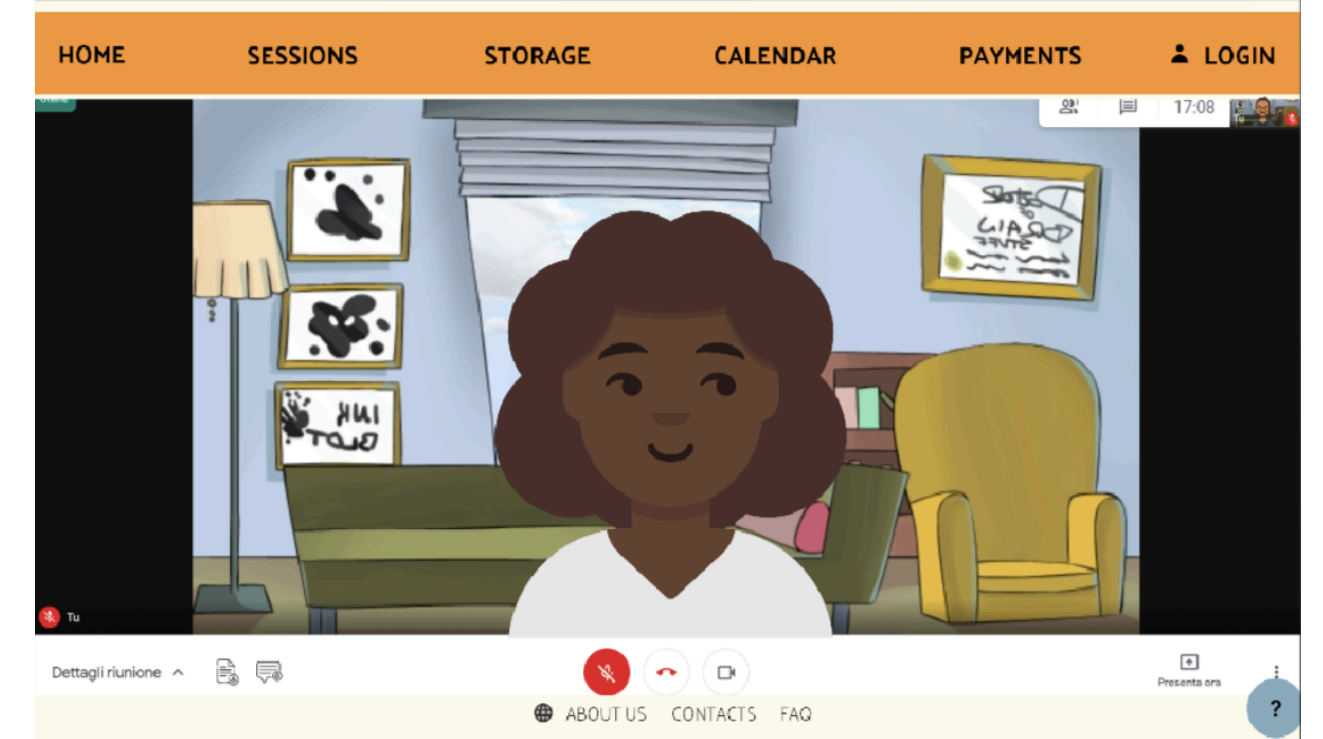
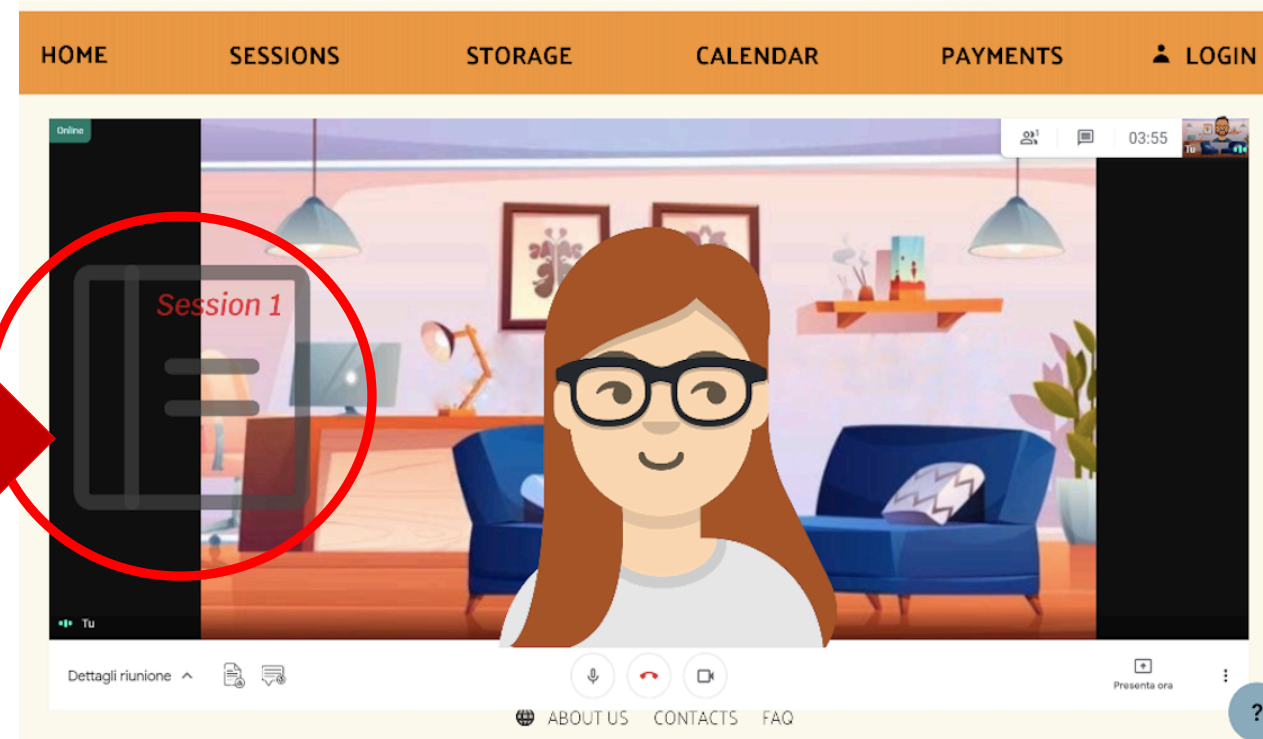


**TherapyRoom** is a website designed specifically for online psychotherapy sessions. Although many scientific studies indicate that online psychotherapy has the same beneficial effects as in-person psychotherapy, at present no specific tool for online sessions is available for professionals. COVID-19 pandemic was a turning point for online psychotherapy service (Wind et al., 2020), and the response to this emergency will be more than a temporary result (Blumenstyk, 2020); it will help providing a permanent solution for ongoing e-health demands, which favour **accessibility, usability, flexibility** and **resilience**, all essential skills for 21st-century institutions.

### Features of the Website

- Video meeting settings
- Personalized Backgrounds
- Transparent virtual notepad
- Virtual archive
- Real-time chat
- Notifications
- Calendar



**Personalized virtual background:** It will be possible to choose between (a) a shared “classic” psychotherapy setting background and (b) a background that can be customized by clients which can reflect their current mood (e.g. depression, anxiety).

**Transparent virtual notepad:** Virtual notepad is a way to pull up an online notebook quickly to store, view, edit and share notes online between psychotherapists and clients, **without losing eye-contact**. It is customizable and can be dragged anywhere directly on the screen. Users can also work on an interactive shared transparent virtual notepad.

**Many other specific settings for online psychotherapy**, such as virtual achieve and **subtitles** available in numerous languages, which will make therapy easier for non-native speakers, and customizable in sizes and fonts. Subtitles are very important tool to make online therapy sessions more **accessible** also to the hearing impaired and to elderly people.

### User Test

We developed a **Mock-up** of the application and showed it to **twelve** users (six psychotherapist, six clients), following the **think-aloud protocol**. We asked their feedback and suggestions related to each feature of the TherapyRoom.

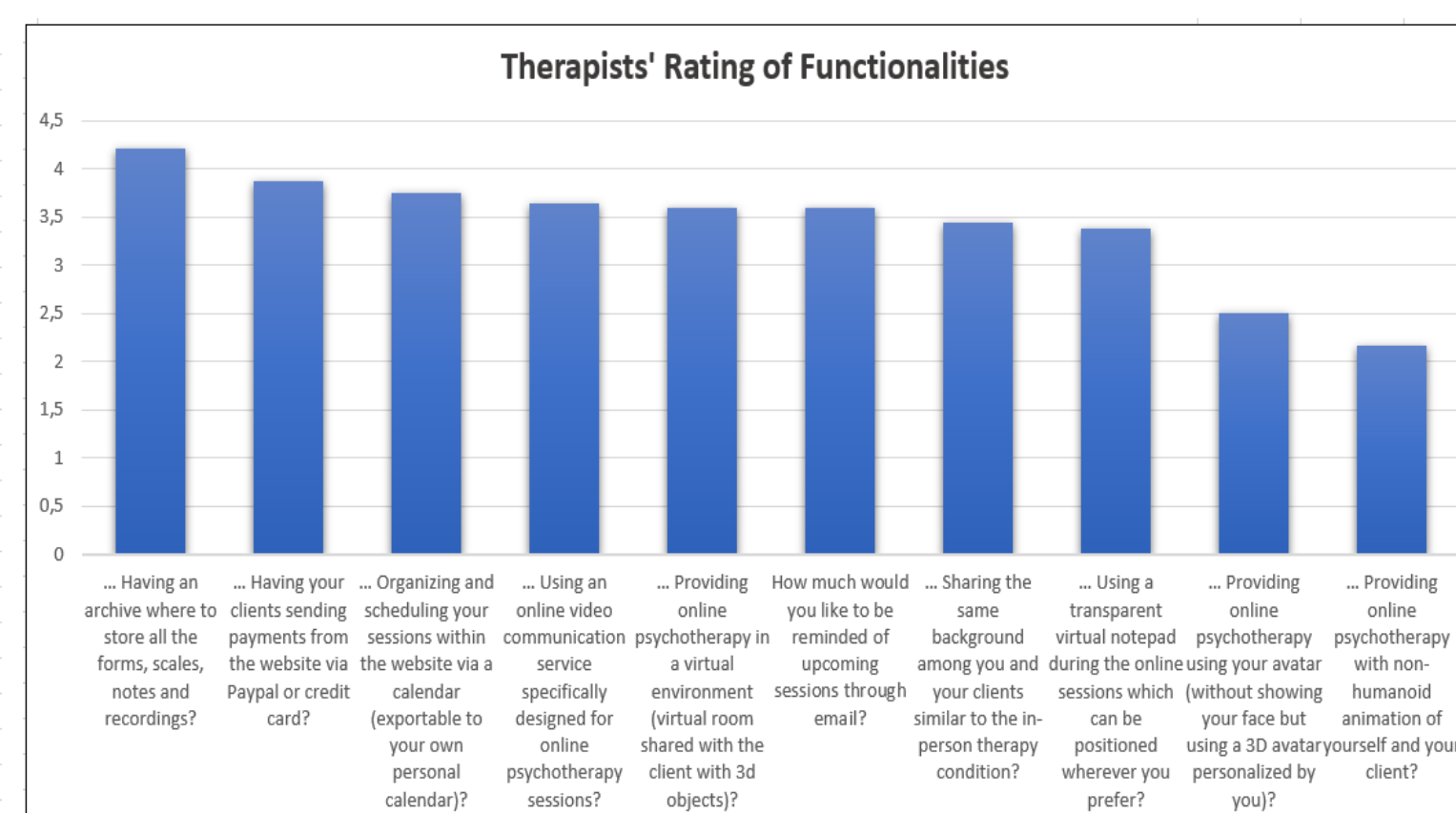
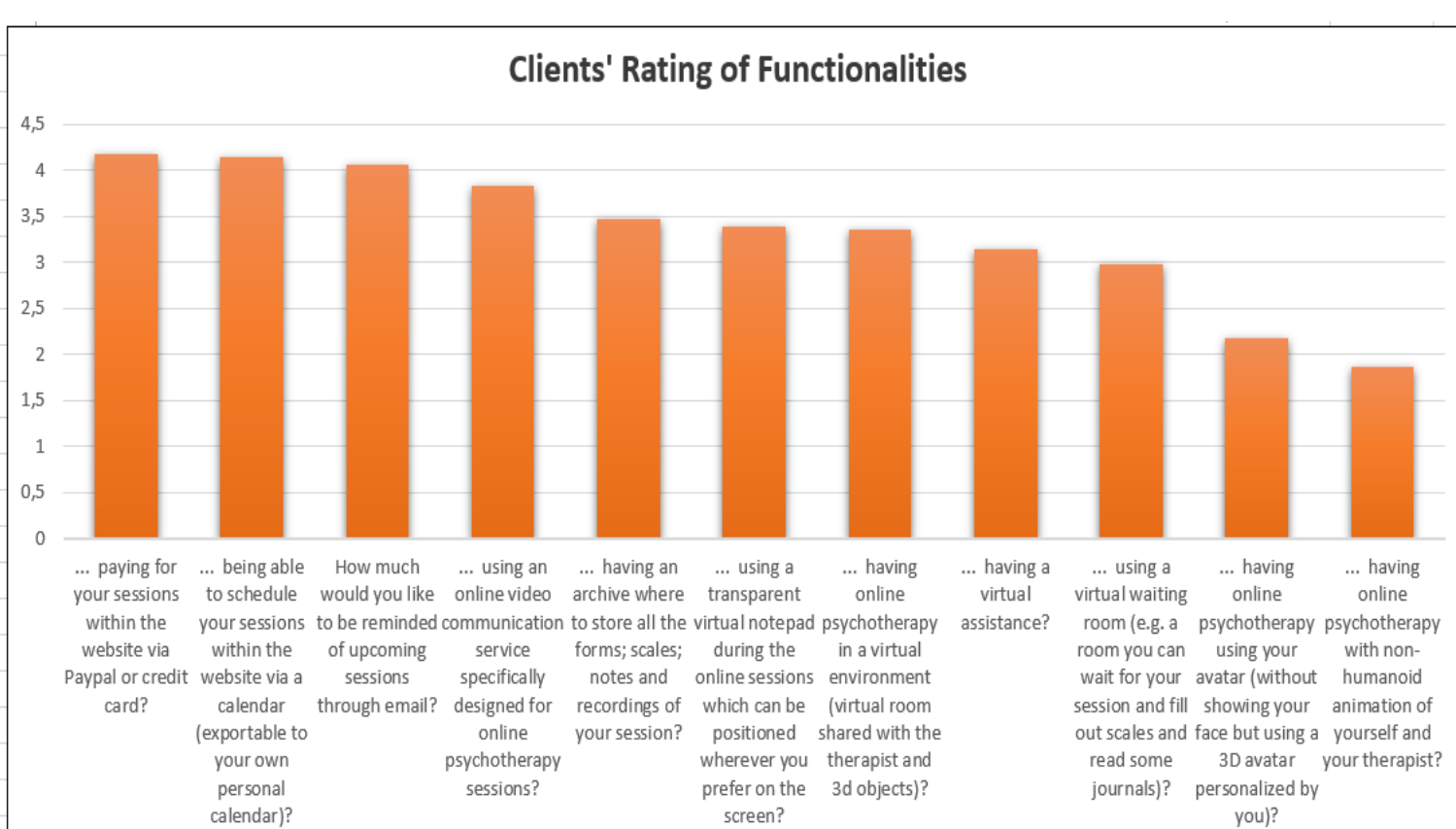
### User Centered Design

**Semi-structured interviews** with psychotherapists and clients from different countries (N=12).

**A survey** (Qualtrics) including both Likert scales and open questions to understand possible users' requirements and feedback (N=84).

### Results

We used the survey's scores and the User Test feedbacks to understand how TherapyRoom would be received and to decide which functions to develop in the beta version of TherapyRoom.



I love visual transparent notepad, it is genius! Not losing eye contact during therapy sessions is crucial and it is going to save us a lot of time.

Anytime I use my video communication tool, my clients can see me online, it is like Facebook chat, it is something that can affect therapeutic alliance because of lack of privacy.

### Conclusion and Future Implications

This project replies to a specific and immediate need of mental health professionals who require an adequate and unique tool to carry out their online therapy sessions. This website will not only be crucial in the short term, since the COVID-19 pandemic increased demands for e-health significantly, but also in the long run. As future developments we plan to implement several features such as support for virtual reality based psychotherapy, **avatar assisted online therapy** in which users are able to create an avatar on their own, **non-humanoid animations** of users in which users are able to choose non-anthropomorphic animation rather than a realistic figure, specific rooms for specific users (**children and elderly patients**), and a **virtual waiting room**.