

Title: Positive Youth Development in the Metaverse

NCT Number: NCT05858593

Upload Date: February 9, 2026

#### **4.1a Detailed Description and Study Protocol**

A pilot feasibility trial will be conducted in the latter half of the year to test the feasibility and usability of the VR-integrated curriculum. Recruitment & Eligibility: All children enrolled in the Chess & Community program will receive a VR headset. However, data will only be collected from children between the ages of 9-17 for whom consent and assent is obtained. All participating children will be assigned to the treatment (VR headset + VR-integrated curriculum) condition.

- Parents will first sign up for the study at the beginning of the semester (e.g., January)
- Parents will be instructed to reach out to the research team via email to indicate interest.
- The research team will screen each family for eligibility via phone calls and address questions as they arise.
- All interested parents and children will attend an orientation session (either in-person or virtual) explaining the study purposes and sign informed consent and minor assent. The enrollment process will be on a rolling basis throughout the academic year.
- Treatment: In the treatment condition, youth will receive the VR-integrated curriculum in addition to receiving the VR headset to use. Treatment duration was once a week for 4 weeks. Outcome measures will focus on the usability and feasibility of the VR headset in tandem with ongoing curricula of the Chess and & Community program and participant responses through survey and behavioral measures. Feasibility assessments will measure the ability to complete the program without active remediation from the research team and the ability of youth participants to correctly use the VR system. Physical health of children will be assessed through a smartwatch (step count and pulse) to determine appropriate sample size for controlled clinical trials in the future.

All devices will be handed out in person by researchers at the afterschool program so that participants may receive specific instructions on how to use the devices and troubleshoot. Researchers will also be able to address questions at that point.

Baseline measures (survey) will be assessed at this point. For the next 4 weeks, participants will be expected to engage in VR content at least 1 hour per week. During the 4 weeks, children will provide open-ended responses to the usability of the system. Engagement with the VR system and successful completion of the program will be measured for feasibility of the VR system at an afterschool setting. All children will be wearing a smart watch to assess physical activity (step count) and heart rate as secondary measures.

The feasibility study will focus on bidirectional communication with Athens Chess & Community, ensuring that the research team can work toward their programmatic priorities and assist in building staff capacity for future collaborations in technology-integrated interventions at the site.