

VR&R: Virtual Reality Respite & Relaxation for Caregivers of People Living with Dementia

Krishna Malik, Vanessa Geitz, Samantha Lewis-Fung, Mattaya Pallett, Sahil Patel, Lora Appel

BACKGROUND

First study investigating how **Virtual Reality** (VR) can be used at home to provide **respite** to caregivers of people living with dementia.

Women are disproportionately affected: they make up **~60–65%** of PLWD and the majority of **family caregivers**

OBJECTIVES

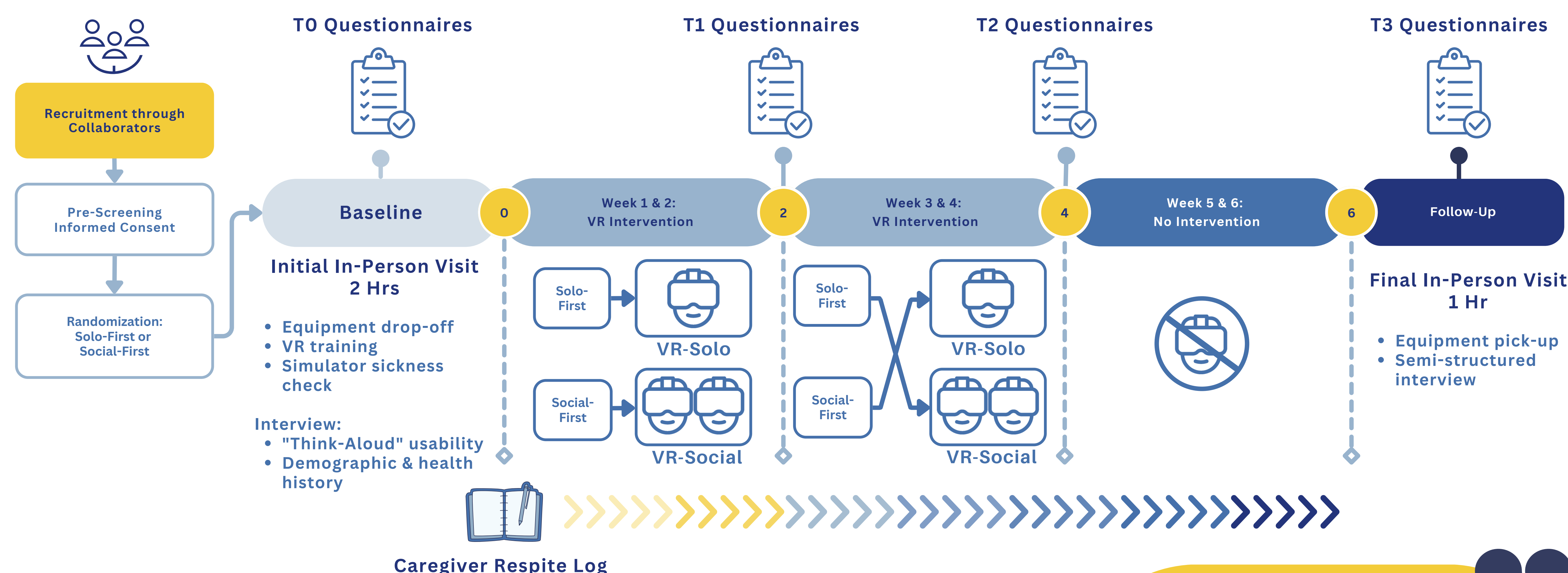
1. **Caregiver Outcomes:** respite, resilience, burden, and well-being.
2. **Dementia-Related Outcomes:** impact on mood, behavioral and psychological symptoms.
3. **Compare VR Formats:** Solo-VR vs. Social-VR.
4. **Optimize Design:** make at-home VR easy, effective, and supportive of caregiver respite.

INTERVENTION

- **caregiVR** platform on Meta Quest 2, managed via Samsung Galaxy S9 FE tablet.
- **94** curated dementia-appropriate 360° videos.
- Sessions recommended **2–3 times per week**, ~30 minutes each.
- **Solo-VR** condition: Caregiver sets up VR for PLWD, then steps away for “respite time.”
- **Social-VR** condition: A trained research assistant visits home and co-facilitates VR use with supportive conversation.

METHODS

Study Design: **6-week** open-label pragmatic crossover trial



RESULTS

Interim results from our first 14* caregiver–PLWD dyads.

*2 dyads withdrew prior to randomization

Target enrollment: 50 dyads (N=100)

12 Participants Living with Dementia (≥65 years)

- Mild (5), Moderate (2), Severe (3), NA (2) dementia
- Average age = 78.75 y.o., 58.33% female



Most Helpful: Social VR

- Enabled caregivers to safely step away for rest or household tasks
- Provided meaningful social connection and interaction



Also Beneficial: Solo VR

- Improves the caregiving experience: “If (s)he is happy, I am happy” & available on demand
- Boosts mood and strengthens social connection for the PLWD

Avg VR Session Length



Solo: 29 min
Social: 30 min

Avg SUS Rating



78.64 (67.5–92.5)
“Good” Usability

Top Respite Activities

1. **Socializing** (phone calls, e-mails)
2. **Productivity** (cooking, cleaning, planning, work)
3. **Personal Time** (making coffee, resting)



4.15/5 Stars Solo

4.45/5 Stars Social

Average Post-Session
VR Experience Rating



92% Caregivers would
recommend VR to a friend

Hearing my wife happy and amused with the VR content was a source of joy

CONCLUSION

- **VR is feasible and well-accepted** — all dyads completed the study after minimal training. Comfort and headset fit were the main barriers; lighter, glasses-style devices and cultural/language-specific content may improve usability.
- **Meaningful benefits** — caregivers gained real respite; people with dementia showed joy, calm, and engagement.
- **Next steps** — recruitment is ongoing; full-sample analysis will follow to quantify impacts on caregiver well-being and dementia-related symptoms.

Learn More &
See References

