

Teaching Discrete Trial Training in Virtual Reality



Berglind Sveinbjörnsdóttir (Reykjavik University, CADIA), Snorri Jóhannsson (Reykjavik University); Asa Rún Ingimarsdóttir (Klettaskóli); Hannes H. Vilhjálmsson (Reykjavik University, CADIA)

CONCLUSION

All participants mastered the steps of Discrete Trial Training (DTT) after training in virtual reality (VR) (figure 3).

PURPOSE

The purpose of the current study was to evaluate the effectiveness of a VR environment in training staff to implement DTT procedure.

METHOD

Apparatus: A VR ready desktop computer attached to an Oculus Rift CV1 HMV and two Oculus Touch VR controllers (figure 1). The environment was created in Unity 3D (figure 2).



Figure 2. An environment created in Unity 3D



Figure 1. A participant using the VR equipment

Participants: Four teachers. None of the participants were familiar with DTT procedure.

Procedure

- **Baseline:** Participants were provided with a data sheet and instructions to read before they implemented DTT trials.
- **Lecture:** Participants listened to an hour long lecture about the rationale for using DTT, the DTT procedure, and examples of the procedure.
- **VR training:** Participants completed training trials in a VR environment. In the environment the participants received feedback for incorrect and correct responses.

Response Measurement: Correct responses were defined as:

- Viewing the data sheet
- Putting the stimuli in the right order
- Using appropriate phrase
- Using appropriate prompt
- Reinforce at the right time
- Log onto data sheet

Experimental Design: Multiple Baseline across participants.

RESULTS

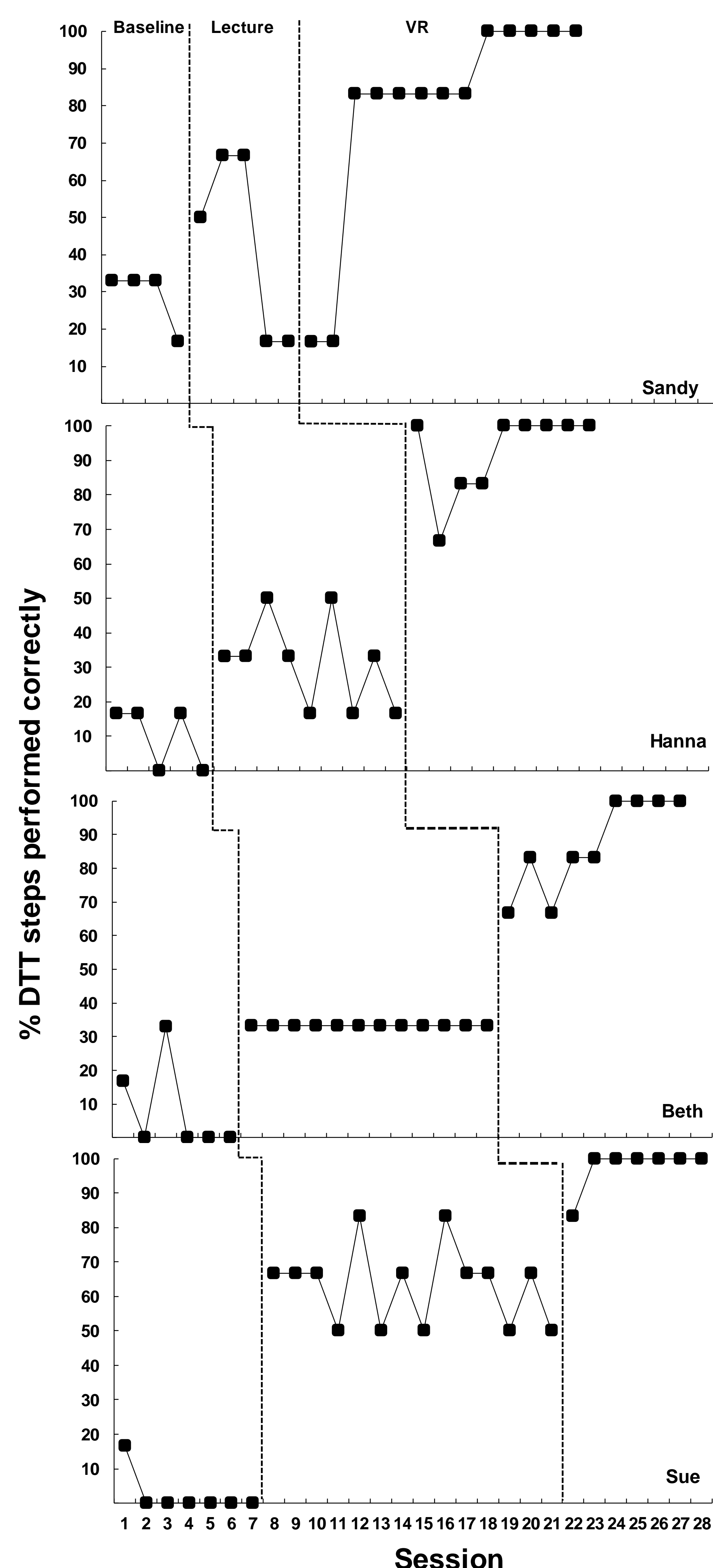


Figure 3. Results for all participants depicting the steps performed correctly in baseline, after the lecture, and after VR training.