

AMA, an application for Annotation, Monitoring and Analysis

A tool to better understand autism

Javier Hernandez*, Akane Sano*, Matthew Goodwin+, Rosalind W. Picard {javierhr, akanes, mgoodwin, picard}@media.mit.edu
 Media Lab, Massachusetts Institute of Technology +Northeastern University (*equal contribution)

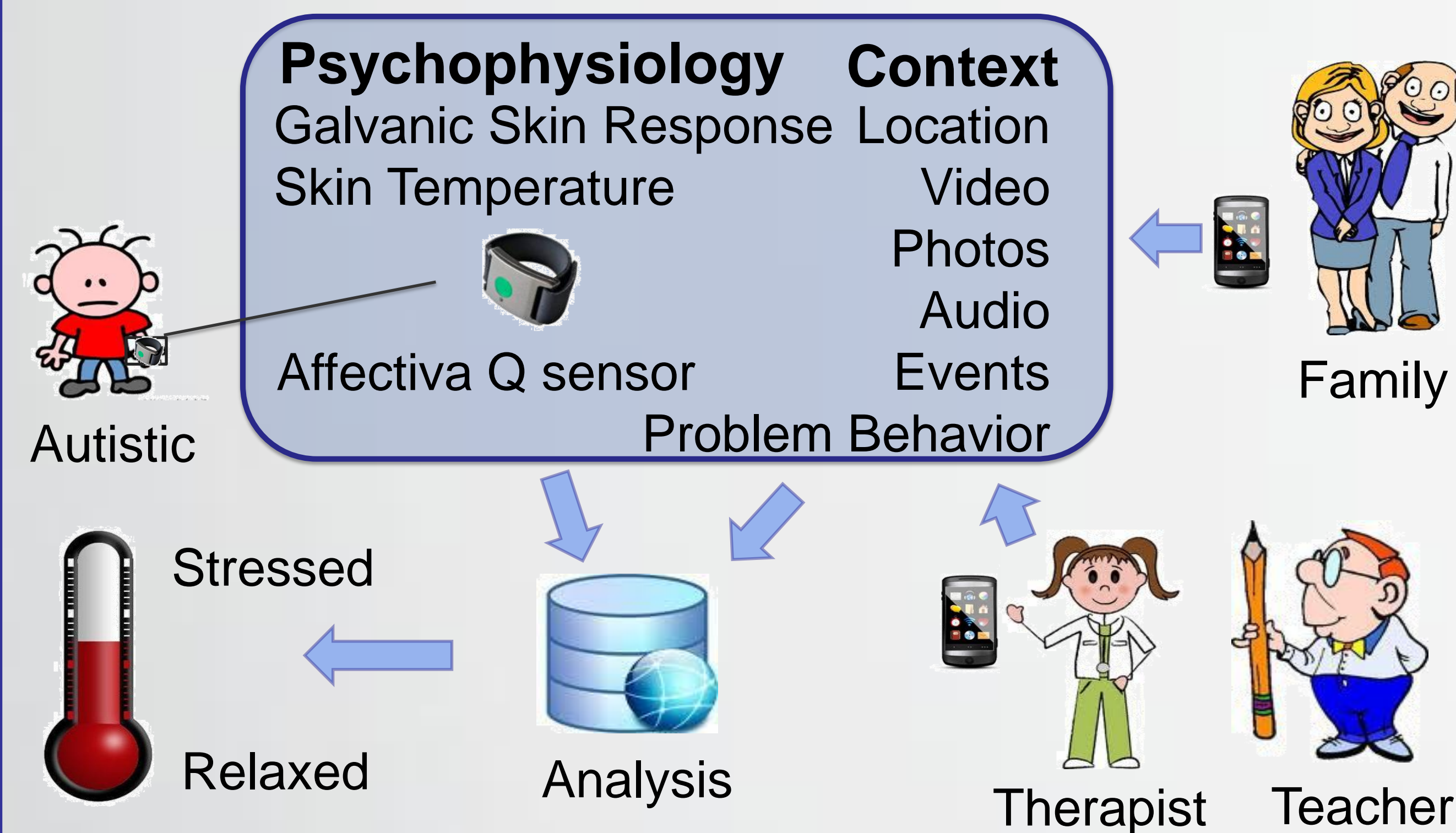
What is AMA?

Android application for multi-modal annotation

Some of the main capabilities are:

- Annotate user-defined events
- Record video/audio/pictures
- Customize buttons and groups of buttons
- Manage annotations

Motivation

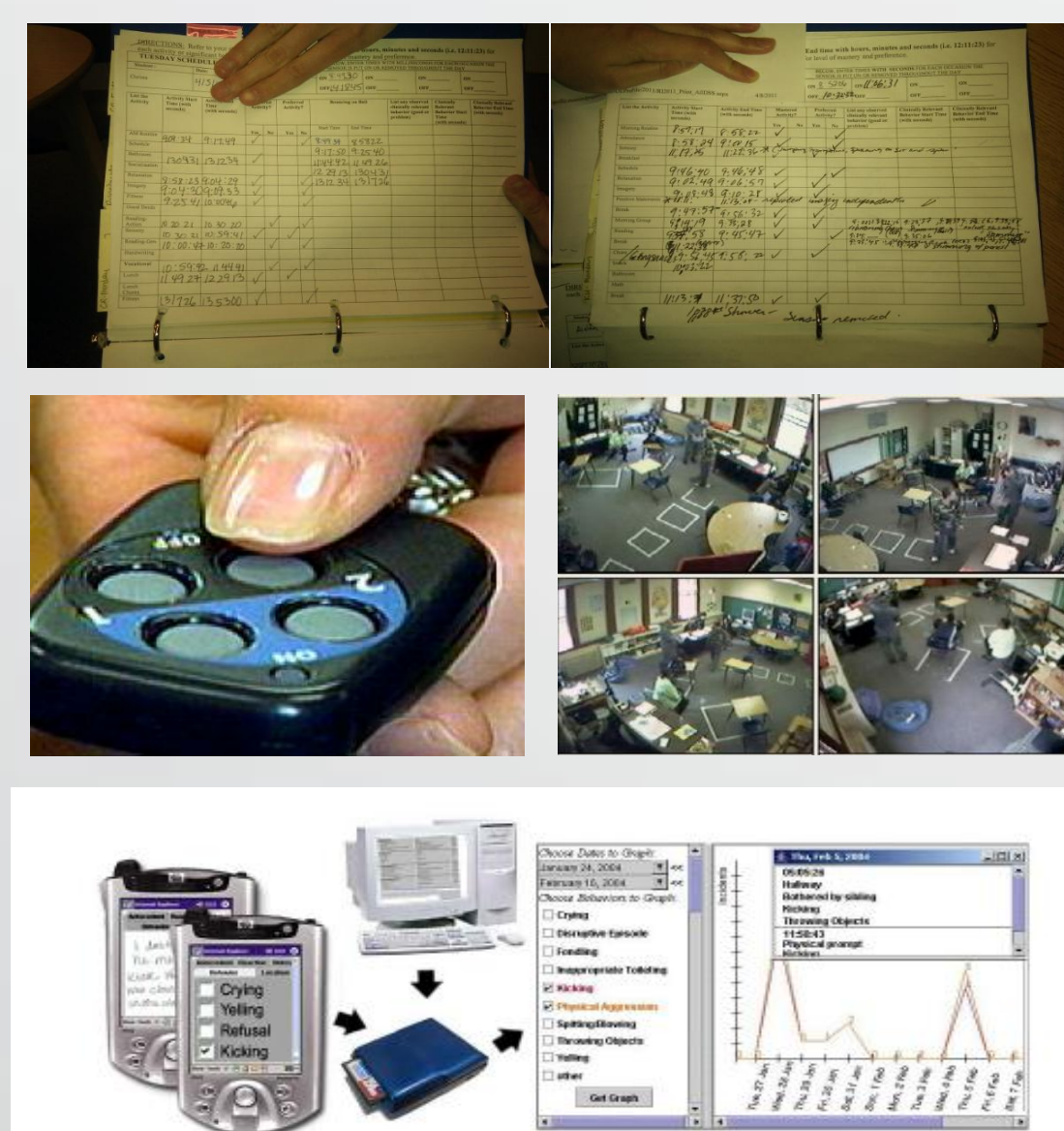


How is problem behavior related to daily environment?

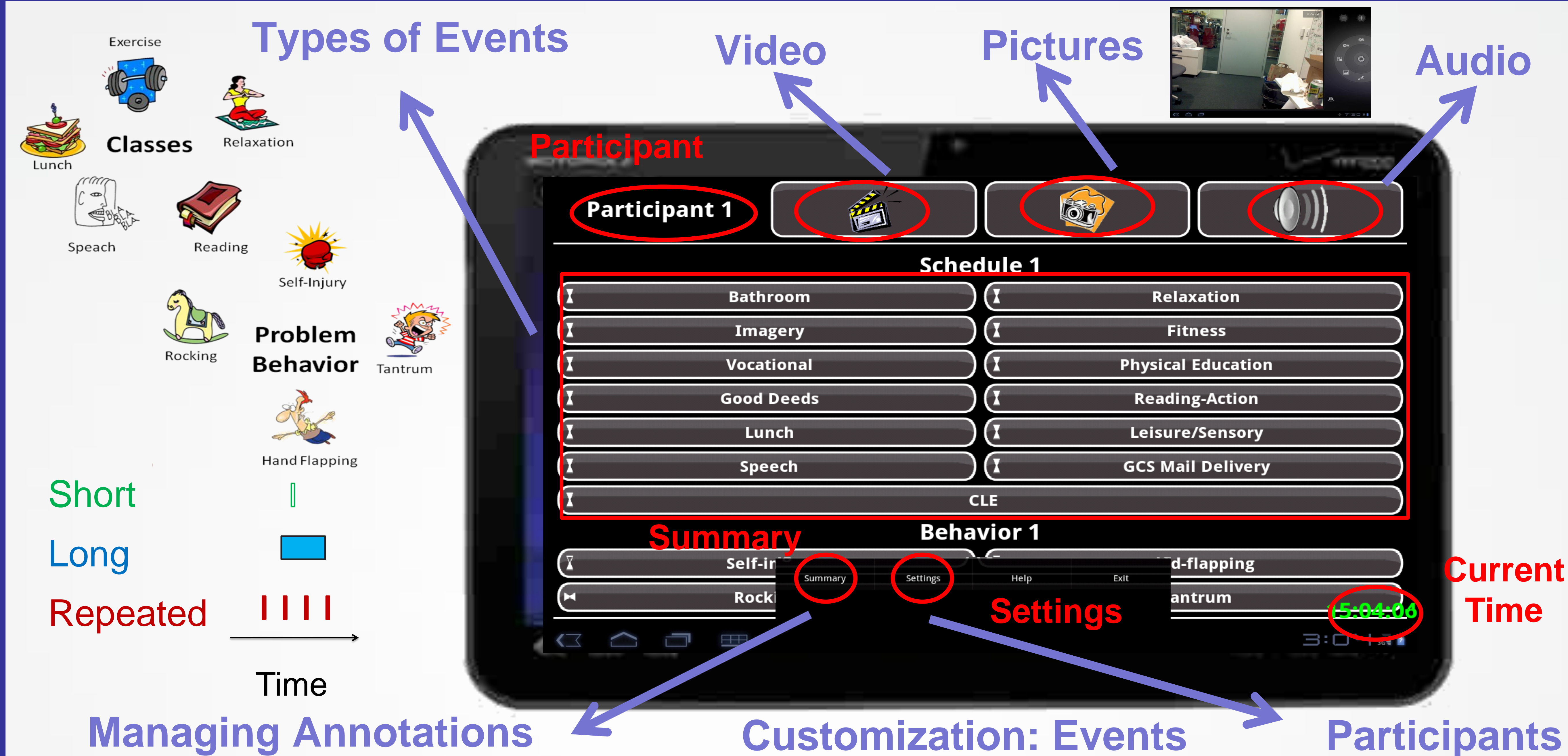
Can we better design person-specific behavioral interventions?

Other tools:

- Paper-Based
- Keypads
- Cell phone Apps
- CareLog
- Symtrend



System and Benefits



Customizable. Both user interface and annotations can be easily customized

Reliable. Quick annotations without need of manual transcription

Scalable. AMA can be installed on all Android devices (e.g., mobile phones)

Sharing information Export to Excel file and send by e-mail

Portable. The device can be used 24/7 to annotate in real-life environments.

Evaluation

Method. 8 teachers at the training center for ASD in Rhode Island System Usability Scale, Usability questionnaire and open-ended questions after half-day use of AMA on the tablet

Results. System Usability Score: **80.3 % (± 11.8)**
 All 8 of 8 teachers complained about time and accuracy in paper & pen and preferred AMA's easy-to-use, quickness, accurate annotation

Suggestions. Prefer to use on the phone / Need a case

