



Contribution ID: 81

Type: **Posterpräsentation**

## **An easy-to-use open-source solution for experience sampling with Smartwatches**

*Monday, 5 September 2022 16:00 (1 hour)*

The Experience Sampling Method assesses psychological concepts and behavior, while intruding everyday life of participants as little as possible. Smartwatches as a form factor seem like an appropriate choice to realize this aim, at least for shorter and more frequent questionnaires where ease of access is important.

For this purpose, we developed a custom open-source firmware for the T-Watch 2020 V2 (LilyGo). The device can be easily programmed via a configuration file without programming skills. Questionnaire data is stored locally on a micro-SD card and can be transferred to a computer without much effort. The firmware allows to present questionnaires with items using common formats like Likert-type scales or visual analog scales. These questionnaires can be event- as well as signal-based, by notifying the user via vibration alarms.

This solution also provides autonomy, as only the device itself is needed for conducting a study, without the need for a constant connection to the Internet or Smartphones, eliminating the risk of software incompatibilities.

In our poster, we give an overview of this device and the firmware and discuss its capabilities and limitations.

**Primary authors:** VOLSA, Selina (Karl Landsteiner Privatuniversität für Gesundheitswissenschaften); STIEGER, Stefan (Karl Landsteiner Privatuniversität für Gesundheitswissenschaften); BATINIC, Bernad (Johannes Kepler University Linz)

**Presenters:** VOLSA, Selina (Karl Landsteiner Privatuniversität für Gesundheitswissenschaften); STIEGER, Stefan (Karl Landsteiner Privatuniversität für Gesundheitswissenschaften); BATINIC, Bernad (Johannes Kepler University Linz)

**Session Classification:** Postersession 1