

## **OBSERVING...**

## Software for observing and coding any events anywhere at any time Overview

For the time being these editions are available:

**Observing-V.** Observing-V is a macOS application for coding continuously video recordings. Functions: Slow-motion at any rate, forward and backward play at any rate, single frame stepping forward and backward, stepping over codings, filter, start and end time of events are coded, basic descriptive statistics, data print and export, ... and more. The video needs to reside locally on the macOS device used for coding or on an attached disk, both preferably a SSD. Frame rate: any. Preferred video format: '.mov'...

**Observing-L.** This version is a macOS application for observing and coding live events on a continuous basis. Functions: Start and end time of events are coded, filter, basic descriptive statistics, data print and export, ... and more. *Observing-L* can configure iPhones as external keyboards for observing and coding events conveniently in the field anywhere at any time (ambulatory assessment).

**Observing-R.** This version is an unusual app. It allows to define deliberately a time span that covers retrospectively past date and past day-time when 'observation' should be done and coding should begin. For example, starting at the actual real day-time, 'observation' of events during the last hour or last five minutes can be coded. If for the retrospective time span zero is chosen observation and coding refer to the actual date and real day-time, that is, coding of the moment. Functions: Event's time of occurrence is coded, filter, basic descriptive statistics, data print and export, ... and more. *Observing-R* can configure iPhones as external keyboards for observing and coding events conveniently in the field anywhere at any time (ambulatory assessment).

Configuring Observing-iR / Observing-iL. Particular useful for a project might be the iPhone versions Observing-iR and Observing-iL. While macOS versions are payable versions iPhone versions are for free. These enable observers to code unobtrusively on the spot without costs and effort. The iPhone versions are not stand-alone applications. They must be configured by the corresponding Master-Software Observing-R or Observing-L. After successful configuration the iPhones operate independently from the master and from each other. The number of iPhones a Master-Software can configure is unlimited. Configuration of an iPhone is independent from the location of the Master-Software. Configurations are sent to iCloud where users can download their individual set-ups after entering unique user-specific credentials. A physical connection between the master device and an iPhone is not necessary. A Master-Software installed on a macOS device in California can configure securely an observer's iPhone in Switzerland. Effort for coding with an iPhone is minimal. Daily routine isn't deranged and only slightly interrupted. Coding becomes a 'minor point' and can be extended over weeks. This opens a seldom insight into the chronological frequencies of events over extended periods of time, that is weeks, months or even years.

Saving and downloading iPhone's Observations. Data are not saved locally on iPhones but saved securely and temporarily on iCloud in a human not-readable format. These data are downloaded by the macOS device with the corresponding Master-Software, that has configured the iPhones. Download can be done at any time. For security reason: after the master has downloaded available data, they are deleted automatically on iCloud. Downloading does not interrupt the process of observation. New observations can be saved on iCloud as before. That is, download needs not wait until the whole observation project is

finished. This feature allows continuous processing of downloaded data and continuous checking events' flow at any time.

Data file. Data are encrypted and saved on the macOS device that has set up the observation task. Location of the data file is hidden. Only the master application that has set up the observation task knows where the files reside. Opening and saving manually the data files as usually is not possible. Data are saved in a human not-readable special format that can only be decrypted and read by the master software installed on the macOS device that has set up the observation task. If other devices need to read and process these data, the master can export them in a human readable format, that is for processing in a spreadsheet or statistic package. This guarantees an optimal security.

Time. Basis for event's time of occurrence and time display is UTC (Universal Time Coordinated), that is, time values are always date and day time values. But all time values are shown in local time. Accuracy of time capture is in seconds 12 places after the decimal point. This allows a precise synchronisation with other timing devices using UTC independently from their location. Each single event in the data file has such an individual time stamp. This feature is useful for epidemiological studies extending over long periods of time, that is days, weeks, months and years.

Code-System. Code-Systems can cover any events that are accessible for human perception and cognition, like behaviours, feelings, moods, attitudes, ambience, environmental, social and physical events. Number of Code-Systems that can be defined is unlimited. If coding is done with a macOS device (Observing-V, Observing-L, Observing-R) new codes can be added to the Code-System during ongoing observation and coding. Added codes can be used instantaneously. Observation and coding can be started even with an empty code-system. This may be very helpful in a pilot study to conceive a new Code-System.

Ambulatory Assessment / Field Studies. Because a Master-Software can configure many iPhones with personalised credentials, iPhone apps are most suitable for field studies (ambulatory assessment) with many probands. Coding with iPhones is only an option offered by *Observing-L* and *Observing-R*. The master devices can also be used for data collection. And if done on a portable macOS device ambulatory assessment is possible too. If coding of the same observation task is done on an iPhone and on a macOS device they does not interfere. Both contribute automatically data to the same data file.

**Program Availability**. All programs are only available on the *App Store*. The apps have been tested thoroughly. They were reviewed by the *Apple Review Team* and thereafter released for sale on the *App Store*. This guarantees an optimal security and a smooth and comfortable workflow. Programs are continuously updated.

## Observing...

There's more to it than you think.

Designed by Science for Science, Institutions and Organisations

Prof. Dr. Gerhard FABNACHT Emeritus University of Bern Switzerland https://www.psys-observing.com

Institute for Psychology Personality Differential Psychology Diagnostic