



BIOPAC Electrodermal Activity (EDA) Analysis

INSTRUCTOR RESUME



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BENEFITS OF THE TUTORIAL

In this tutorial, an introduction into the physiological basis for electrodermal activity (EDA) recordings will be given. Terminology will be reviewed to explain the conventions used in the AcqKnowledge software.

FEATURES

The tutorial will be based on examples with real experimental data. The audience will be walked through the steps in the analysis process. Two types of data analysis will be covered: comparisons for EDA activity between different conditions in an experiment and event-related EDA analysis. Sample data will include trials from running the Iowa Gambling Task as well as two other experimental setups.

1. Introduction to EDA recording and analysis.
2. Overview of existing analysis techniques.
3. Analysis based on tonic EDA.
4. Location of SCRs (skin conductance responses).
5. Event-related EDA analysis.
6. Special cases: dealing with skin conductance responses too close together; controlling stimulus delivery based on the current EDA activity via real-time signal monitoring in order to avoid stimulus delivery while a SCR response is in progress.
7. How to modify the analysis routines to customize the analysis. Using the BIOPAC Scripting Language to modify the code for the analysis, create your own dialogs and automate the process completely.
8. A discussion of additional enhancements that provide more options for multiple stimulus event types and unmatched events.

AUDIENCE

This tutorial is aimed at new and existing users and other interested in adopting BIOPAC solutions for life science data acquisition and analysis for their research and education needs.