# Preregistration Protocol: Smartphone Sensing Panel Study

This preregistration protocol deals with specific research questions and is completed before the data is collected. Study procedures and further background information are described in the corresponding basic protocol. This template is inspired by the OSF Prereg Challenge template (<https://osf.io/>).

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| *Working Title* |
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| *Author(s) of the preregistration protocol* |
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| *Date* |
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## Background

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| *Background Information (Optional; Short description of the theoretical background/introduction to research question)* |
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| *Research question(s)* |
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| *Hypotheses**Please provide hypothesis for predicted results. If multiple hypotheses, uniquely number them (e.g. H1, H2a, H2b,) and refer to them the same way at other points in the registration document and in the manuscript.* |
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## Variables

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| *Which variables will be used? (see Variables in the basic protocol for an extensive overview of all available variables)**This section shall be used to unambiguously clarify which variables are used to operationalize the specified hypotheses. Please (a) list all variables that will be used in this study and (b) explicitly state the functional role of each variable (i.e., independent variable, dependent variable, covariate, mediator, moderator). It is important to (c) specify for each hypothesis how it is operationalized, i.e., which variables will be used to test the respective hypothesis and how the hypothesis will be operationally defined in terms of these variables. This section is closely related to the statistical models used to test the hypotheses.* |
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## Analysis Plan

### Preprocessing

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| *Inclusion criteria (e.g., criteria for including (1) participants (e.g., Do you only use a subsample?, (2) study days (e.g., only weekdays, certain number of study days), (3) any other criteria concerning data quality (e.g., only days with at least x% of logging data) etc.**If you cannot specify these aspects now, please state why.*  |
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| *Definition of variables based on smartphone sensing. Please specify your degrees of freedom in variable extraction procedures, e.g.,* * *time information (e.g., what does night, daily, weekend exactly mean?)*
* *Aggregation measures (e.g., measures of central tendency/dispersion).*

*If you cannot specify these aspects now, please state why.*  |
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| *Further preprocessing steps (e.g., transformation of data, handling of missing data/outliers etc.)*  |
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### Data Analysis

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| *Statistical models**Please specify the statistical model (e.g. t-test, ANOVA, LMM) or algorithms that will be used to test each of your hypotheses. Give all necessary information about model specification (e.g., variables, interactions, planned contrasts) and follow-up analyses. Include model selection criteria (e.g., fit indices), corrections for multiple testing, and tests for statistical violations, if applicable. Please also indicate Inference Criteria (e.g., p-values, effect sizes, performance measures etc.).* |
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| *Planned exploratory analysis (Optional)* |
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