

Methodology and Statistics Checklist

Please complete the checklist below and upload it into your application. This form must be completed with reference to your transcript of records, i.e., all courses mentioned below must appear on your transcript of records. It is not necessary to have studied all topics in order to be admitted, so please complete this form accurately!

Please note: Your application will not be processed until we have received a completed checklist.

| | | For each topic, mark your level of proficiency with X | | | |
|--------------------|--|---|---|--|--|
| | | I am not familiar with this topic | I have been introduced to this topic, but I do not know the specifics | I attended and passed a course in which this topic was covered | If you took a course in which this topic was covered, add the name (not the code) of the course as it appears on your transcripts of records |
| Methodology | | | | | |
| 1 | Conceptual model | | | | |
| 2 | Hypotheses (null and alternative H, directionality) | | | | |
| 3 | Operational definitions, taxonomies and facet designs | | | | |
| 4 | Moderators and mediators | | | | |
| 5 | Confounding factors and spurious relations | | | | |
| 6 | Experimental designs | | | | |
| 7 | Quasi-experimental designs | | | | |
| 8 | Mixed designs (within and between factors) | | | | |
| 9 | Content and corpus analysis | | | | |
| 10 | Focus groups | | | | |
| 11 | Research interviews | | | | |
| 12 | Validity (internal, external, construct, face) | | | | |
| 13 | Reliability (homogeneity, generalizability, reproducibility) | | | | |
| 14 | Scale types (Likert, semantic differential, Guttman) | | | | |
| 15 | Sampling procedures (random, stratified, convenience) | | | | |

Statistics: Basic

| | | | | | |
|----|---|--|--|--|--|
| 16 | Levels of measurement (nominal, ordinal, interval, ratio) | | | | |
| 17 | Descriptives (mean, variance, standard deviation) | | | | |
| 18 | Graphs (box plot, histogram, line chart, scatter plot) | | | | |
| 19 | Linear regression and Pearson's r | | | | |
| 20 | Type I and Type II errors | | | | |
| 21 | Assumptions of parametric tests | | | | |
| 22 | Contingency tables and Chi-square tests | | | | |
| 23 | t-test (independent groups, matched pairs) | | | | |
| 24 | One- and two-way Anova | | | | |
| 25 | Confidence intervals and error bars | | | | |
| 26 | Effect sizes (such as Cohen's d) | | | | |
| 27 | Reliability indices (Cronbach's alpha, kappa) | | | | |
| 28 | Non-parametric tests (Kruskall-Wallis, Friedman etc.) | | | | |

Statistics: Advanced

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|----|--|--|--|--|--|
| 29 | Multiple and partial correlation | | | | |
| 30 | Manova and repeated measurements Anova | | | | |
| 31 | Effect sizes (such as partial eta-squared) | | | | |
| 32 | Interaction effects and covariates | | | | |
| 33 | Testing basic assumptions (homoscedasticity, normality etc.) | | | | |
| 34 | Mediation analysis (method Hayes) | | | | |
| 35 | Logistic regression | | | | |
| 36 | Principal Components Analysis and Factor analysis | | | | |

Statistics: Use

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|----|--|--|--|--|--|
| 37 | Code of conduct (fraud, plagiarism, informed consent) | | | | |
| 38 | Defining and recoding data-files; computing new scores | | | | |
| 39 | Running SPSS for (most) of the above types of analyses | | | | |
| 40 | Running R for (most) of the above types of analyses | | | | |
| 41 | Experience with other statistical software (please indicate) | | | | |

Please type your name and the date below. **By doing so, you are confirming that you have completed this checklist correctly.** It is your responsibility to ensure that the information is correct. If you are admitted to a program of study, based on the information completed above, and you have not completed it correctly, your study progress may be delayed.

Name:

Date: