

## **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,			
M	ethodology	I am <b>not</b> 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
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			/	UX Design
11	Research interviews				Design Process
12	Validity (internal, external, construct, face)				Space form and structure
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)				Solid Geometry				
17	Descriptives (mean, variance, standard deviation)		/						
18	Graphs (box plot, histogram, line chart, scatter plot)			/	Solid Geometry				
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)			/	UX Design				
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									
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								
Sta	Statistics: Use								
37	Code of conduct (fraud, plagiarism, informed consent)				Design Process				
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								

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.

41 Experience with other statistical software (please indicate)

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