Pre-registration guideline for authors

SCM aims to increase the quality and transparency of research and therefore offers the (optional) opportunity to submit pre-registered reports of empirical studies yet to be conducted. To submit a pre-registered report, authors must: (1) pre-register their study *prior to data collection* on an open science registry (preferably OSF), (2) prepare a pre-registered report, and (3) formally confirm the pre-registration in the submission system.

How to proceed

- (1) Prior to submission of the pre-registered report, authors must register their study on one of the official open science-registries (preferably <u>www.osf.io</u>). The registry entry must include information on: hypotheses, research design, procedure, operationalization and measures, statistical analysis plan, and materials (e.g., experimental stimuli). The exact criteria my vary depending on the type of study (see Table 1 for an overview).
- (2) After the pre-registration, authors submit their pre-registered report, which corresponds to the front-end of a regular research paper. It consists of an introduction, a theoretical section with hypotheses, a method section, as well as a data analysis plan, but without any data or analysis presented. The pre-registered report must include the same information elements as the pre-registration (see above and Table 1).
- (3) Formatting and structure of pre-registered reports follow the existing SCM guidelines (see: <u>www.scm.nomos.de/autorinnenhinweise</u>). On the first page (not the title page), authors must state explicitly that their study has been pre-registered, by adding the following note above the title: "This manuscript is a pre-registered report. Details of the pre-registration can be obtained from: [LINK TO THE OSF-ENTRY]".
- (4) All pre-registered reports undergo a regular double-blind peer review process (including the anonymized registry entries). Information on how to anonymize pre-registration entries for review see: <u>https://help.osf.io/article/158-create-a-preregistration</u>. Provided a recommendation to revise, authors are invited to address the reviewers' remarks. After a successful revision, authors will receive an "in-principle acceptance", meaning that SCM accepts the final manuscript regardless of the results obtained, provided that the authors stick to their planned procedures.
- (5) After an in-principle acceptance, authors conduct their study and submit the final manuscript (including results and discussion). The results section must include *all* planned analyses. Analyses corresponding to the initial outline must be labeled as "Confirmatory analysis". Analyses deviating from the initial proposition must be reported separately and disclosed as "Exploratory analysis". Any other changes to or deviations from the pre-registered procedure must be documented and explained.
- (6) The results and discussion section of the final manuscript will undergo another review round including an examination of possible deviations from the initial plan of analysis.

Pre-registration guideline for reviewers

The SCM does not provide for a standardized review process. You are therefore welcome to address and deepen points that are particularly important from your perspective. The usual criteria of relevance, theoretical foundation, method, comprehensibility, and clarity of presentation can be used as reference points. In addition, preregistered reports should include information on: the following: hypotheses, research design, procedure, operationalization and measures, statistical analysis plan, and materials (e.g., experimental stimuli). The exact criteria my vary depending on the type of study (see Table 1 for an overview).

	Content analyses	Surveys	Observations	Systematic reviews
Research questions	Outline of theoretical background and review of the existing literature			
and hypotheses	Definition of independent, dependent, moderating, mediating, and control variables			
	Formulation of research questions			
	Hypotheses (including interactions) with expected causal directions			
	Description of theoretical models			
	Designation of exploratory and confirmatory parts			
Study design	experimental / correlational			• Type of review (e.g., meta-analysis,
	Iongitudinal / cross-sectional			scoping review etc.)
	within vs. between			
Time frame	Start / end of data collection			
	Field work schedule			
Population and	 Definition of the target population 	 Definition of the target population 	 Definition of the target population 	 Definition of the target population
sampling	 Types of sources (e.g., media 	 Recruiting of participants (e.g., 	 Recruiting of participants 	 Types of sources included (e.g.,
	outlets, social media accounts,	commercial panel, inclusion /	Sampling procedures for participants	databases / journals / unpublished
	websites etc.)	exclusion criteria)	(e.g., search queries, sampling	manuscripts / grey literature etc.)
	 Selection of sources (inclusion / 	Sampling procedures for participants	method)	 Selection of sources (databases,
	exclusion criteria, sampling	(e.g., quota / random sample,	 Inclusion / exclusion criteria for 	contact procedures for unpublished
	procedures)	convenience sample)	sources and cases	manuscripts, inclusion / exclusion
	 Selection of cases (inclusion / 	 Planned sample size based on a 	 Software packages used for data 	criteria, sampling procedures)
	exclusion criteria, sampling	power analysis	collection	 Selection of cases (inclusion /
	procedures, search queries)	 Stopping rule for the number of 	 Planned sample size based on a 	exclusion criteria, sampling
	 Planned sample size based on a 	cases	power analysis	procedures, search queries)
	power analysis	 Software packages used for data 	 Software packages used for data 	 Software packages used for data
	 Software packages used for data 	collection (e.g., online survey tools)	collection (e.g., tools for web	collection
	collection (e.g., tools for web		scraping, tracking)	
	scraping, tracking)			
Operationalization	 Introductions and debriefings (if 	 Introductions and debriefings (if 	 Introductions and debriefings (if 	 Categories with coding instructions
and measurement	applicable)	applicable)	applicable)	and scales
	 Categories with coding instructions 	 Question and item wordings 	 Categories with coding instructions 	 Number of coders, distribution of
	and scales	 Factor levels and stimuli (for 	and scales	material among coders
	 Factor levels and stimuli (for 	experimental studies)	 Factor levels and stimuli (for 	 Procedure (sequential)
	experimental studies)	 Scales with expected dimensions 	experimental studies)	
	 Number of coders, distribution of 	 Procedure (sequential) 	 Procedure (sequential) 	
	material among coders			
	Procedure (sequential)			
Analyses and	• Planned data pre-processing (e.g., data cleansing and preparation, transformations, treatment of missing values, definition / treatment of outliers, other criteria for post-			
statistical tests	hoc exclusion of cases)			
	• Planned statistical procedures and tests (e.g., for sample description, manipulation checks, hypothesis testing, detecting publication bias etc.)			
	• Planned quality checks and definition of cut-off values (e.g., coder reliability, scale reliability, p-values, manipulation checks, detection of publication bias)			
	Alternative analysis procedures if conditions are not met			
	Planned exploratory analyses			

Table 1 Possible elements of preregistration / pre-registered reports