

Research Master Thesis Measurement Error Report Coding

Start of Block: Identification

Many_labs_version To which Many Labs version does this study/replication belong to?

☐ 1 (1)

☐ 2 (2)

☐ 3 (3)

☐ 5 (4)

research_type Is the coded measurement from a pre-registered replication protocol or an original paper?

☐ Replication (1)

☐ Original (2)

research_title Write down the title of the original research.

measure_name Write down the name of the used measure or otherwise a short description of the measure

variable_name Write down the name of the measured variable

Q58 This variable came from a single measure of multiple variables/dimensions.

- ☐ False (1)
- ☐ True (2)
- ☐ Not Applicable (3)



variable_order Write down in order of appearance in the methods section, what order this measure was described in within the research protocol/paper.

End of Block: Identification

Start of Block: Basic Info

Search Practice In order to answer the following questions take these steps and only these steps in order to answer the questions:

1. Scan the abstract of the paper/replication protocol.
2. Do a keyword search for the measured variable currently under investigation:
[\\${variable_name/QuestionText}](#)
3. Read the methods, procedure, materials, measure, or any similar named sections of the paper/protocol.
4. Read through the initial parts of the results section which describe how the measure outcome were quantified into variables.

Refer to these methods in order to answer each question when necessary.



N What was the sample size for this measurement?

N_items Is the measure a 1 item measure or a multiple item measure?

- ☐ 1 item measure (1)
- ☐ multiple item measure (2)
- ☐ The measure is not a scale (3)

hypothesis_support Did the replication find results in support for the original paper's hypothesis/hypotheses. Based on $p < 0.05$ & same direction as the hypothesized effect of the original paper (Note: include the entire results section of the published article as a source for answering this question).

- ☐ Yes (1)
- ☐ No (2)
- ☐ Unclear (Unclear can mean: significant effect but in different direction than the hypothesis/hypotheses; some effects significant some not; other atypical qualifications) (3)
- ☐ Not Applicable (4)

End of Block: Basic Info

Start of Block: Reliability

Search Practice In order to answer the following questions take these steps and only these steps in order to answer the questions:

1. Scan the abstract of the paper/replication protocol.
2. Do a keyword search for the measured variable currently under investigation:
[\\${variable_name/QuestionText}](#)
3. Read the methods, procedure, materials, measure, or any similar named sections of the paper/protocol.
4. Read through the initial parts of the results section which describe how the measure outcome

were quantified into variables.

Refer to these methods in order to answer each question when necessary.

reliability_type What type of reliability coefficient was reported?

- ☐ alpha (1)
- ☐ omega (2)
- ☐ retest (3)
- ☐ interrater (4)
- ☐ Other (5) _____
- ☐ Not Reported (6)
- ☐ Not Applicable (7)



reliability_coeff What was the estimated value of this reliability? (skip question if no reliability was reported)

End of Block: Reliability

Start of Block: Transparency & Validity

Search Practice In order to answer the following questions take these steps and only these steps in order to answer the questions:

1. Scan the abstract of the paper/replication protocol.
2. Do a keyword search for the measured variable currently under investigation: [\\${variable_name/ChoiceTextEntryValue}](#)
3. Read the methods, procedure, materials, measure, or any similar named sections of the paper/protocol.

4. Read through the initial parts of the results section which describe how the measure outcome were quantified into variables.

Refer to these methods in order to answer each question when necessary.

Def1 A psychological/sociological definition is given to the name of the measured variable within the paper.

- ☐ False (1)
- ☐ True (2)
- ☐ Not Applicable (3)

Op_version Give the name of the specific version of the used measure (if described).

Op1 The specific version of the measure (short/long, language) is described.

- ☐ False (1)
- ☐ True (2)
- ☐ Not applicable (3)

Op2 The administration format (pen-and-paper/computer) and environment (in public/in a lab) are described (Note: both should be present for a true rating).

- ☐ False (1)
 - ☐ True (2)
 - ☐ Not applicable (3)
-

Op3 The administration procedure, meaning the steps that took place in the administration of the measure, are described.

- ☐ False (1)
 - ☐ True (2)
 - ☐ Not applicable (3)
-

Op4 The characteristics of the procedure are linked to the construct that was investigated (e.g. did they explain why this operationalisation was needed to measure the construct)

- ☐ False (1)
 - ☐ True (2)
 - ☐ Not applicable (3)
-

Op5 Example items are presented within the text or in an appendix (note: appendix should only be considered as a satisfactory source of measurement information for this question).

- ☐ False (1)
- ☐ True (2)
- ☐ Not applicable (3)

Sel_existing Were previously existing materials used for the measure?

- ☐ False, materials were newly developed for this study (1)
 - ☐ True, namely: (2) _____
 - ☐ Not Clearly Stated (3)
-

Sel1 The source of the scale is provided (in case the scale was newly developed, this should be clearly stated)

- ☐ False (1)
 - ☐ True (2)
 - ☐ Not applicable (3)
-

Sel2 Reasoning is given for why this measure was preferred or optimal for the presented research, or why a new measure needed to be developed if a new measure was created (many different measures may exist for the same construct, thus it should be clear why this specifically was chosen).

- ☐ False (1)
 - ☐ True (2)
 - ☐ Not applicable (3)
-

Sel3 Description or reference to psychometric evidence for the validity of the scale beyond standard reliability measures (for instance, results from a factor analysis or IRT model). Or if no additional evidence is available this is clearly stated (note: a lack of validity evidence does not count here, a clear statement must be made by the authors specifically indicating the lack of validity evidence).

- ☐ False (1)
 - ☐ True (2)
 - ☐ Not applicable (3)
-

Sel4 There is psychometric evidence for the scale based on data outside of the main analyses presented in this paper/report. This can refer to evidence from a previous study, or a separate study that was conducted for the purposes of validation and reported within this paper/report.

- ☐ False (1)
 - ☐ True (2)
 - ☐ Not applicable (3)
-

Sel_psych_evidence What kind of analysis was reported to provide psychometric evidence?

- ☐ Exploratory Factor Analysis (1)
 - ☐ Confirmatory Factor Analysis (2)
 - ☐ Item Response Theory Model (3)
 - ☐ Other, namely: (4) _____
 - ☐ None (5)
 - ☐ Not Applicable (only report this if psychometric evidence would not be possible for this measure, otherwise report as None) (6)
-

Quant1 The number of items are described.

- ☐ False (1)
- ☐ True (2)
- ☐ Not applicable (3)
-

Quant2 The number of response options are described.

- ☐ False (1)
- ☐ True (2)
- ☐ Not applicable (3)
-

Quant3 Any recoded responses (for example reverse coding) are described.

- ☐ False (1)
- ☐ True (2)
- ☐ Not applicable (3)
-

Quant4 The calculation of aggregated score (sum/mean/factor) are described.

- ☐ False (1)
- ☐ True (2)
- ☐ Not applicable (3)

End of Block: Transparency & Validity

Start of Block: Modification check

Mod_check Was the measurement modified for this research?

- ☐ True (1)
- ☐ False (2)
- ☐ None Reported (3)

End of Block: Modification check

Start of Block: Measure Modification

Search Practice Mod In order to detect any measurement modifications read the methods/measure/materials section of the paper/protocol. Modifications refer to changes both in the materials as well as the way in which the measures were conducted.

Mod1 Any format changes are mentioned (paper-and-pencil <--> computer), if no changes were made to the format, and this was mentioned then code as No modification. If it is not clear, then code as False.

- ☐ False (1)
 - ☐ True (2)
 - ☐ No modification (3)
 - ☐ Not applicable (4)
-

Mod2 Validity evidence for the newly formatted measure, or reasoning for why the format should not impact validity is presented. If the formatting did not change, then code as No modification. If it was not clear whether or not the formatting had changed, then code as Not applicable.

- ☐ False (1)
 - ☐ True (2)
 - ☐ No modification (3)
 - ☐ Not applicable (4)
-

Mod3 The language in which the measure was conducted is mentioned and if this deviated from the original this is mentioned. If there was no change in language code as No modification. If it is not clear, then code as False.

- ☐ False (1)
 - ☐ True (2)
 - ☐ No modification (3)
 - ☐ Not applicable (4)
-

Mod4 Validity evidence for the translated measure, or reasoning for why the translation should not impact validity is presented. If no changes to formatting were made, then code as No modification. If it was not clear whether or not the scale was translated, then code as Not applicable.

- ☐ False (1)
 - ☐ True (2)
 - ☐ No modification (3)
 - ☐ Not applicable (4)
-

Mod5 If number of items and/or response options deviated from the original, this is mentioned. In case of no deviations, respond as No modification. If it is not clear, then code as False

- ☐ False (1)
 - ☐ True (2)
 - ☐ No modification (3)
 - ☐ Not applicable (4)
-

Mod6 Validity evidence is given for the change number of items/response options (such as weak factor loading, more variance in response options improved statistical properties), or reasoning for why the change was necessary. If the number of items and response options remained the same, then code as No modification. If it was not clear whether or not number of items/response options were modified, then code as Not applicable.

- ☐ False (1)
 - ☐ True (2)
 - ☐ No modification (3)
 - ☐ Not applicable (4)
-

Mod_time Were modifications made to the measure/procedure/coding made before or after/during data collection?

- ☐ Before (1)
- ☐ After/During (2)
- ☐ Not reported (3)
- ☐ Not applicable (4)

End of Block: Measure Modification
