

## TCSM Assignment 1: Path Analysis

### Insufficient

### Sufficient

### Excellent

#### 1. Data description

No citation for the data source; No descriptive statistics; No explanation of the data and/or the variables analyzed; Dataset not suitable.

Dataset is suitable; Data source is cited; The data and variables analyzed are explained; Descriptive statistics provided.

Very clear and succinct description that shows good understanding; Extra effort applied to making the data description efficient and effective (e.g., through novel tables or figures); Extra effort applied to processing and cleaning the data.

#### 2. Research question and theoretical model

Missing or malformed research question; Insufficient model (e.g., fewer than three variables); Missing or inaccurate path diagram; Theoretical model is not described well enough to interpret the results; Theoretical model does not match the RQ.

A relevant research question is clearly stated; An accurate path diagram is provided; The theoretical model matches the RQ and is well-defined but perhaps not extensively enough to fully replicate the analysis.

The research question is particularly interesting or unique; The theoretical model is rigorously defined with well-formatted path diagrams and/or equations; The model can be reproduced based on only this description.

#### 3. Model estimation

Model syntax is not provided; The estimates reported do not match the syntax provided

The model defined by the syntax correctly answers the research question and matches the reported results; The relevant syntax is provided with the report and very little extraneous code is included.

The syntax provided in the appendix is formatted and annotated especially clearly; No extraneous syntax is included.

#### 4. Reporting and interpreting results

Results not interpreted or interpreted incorrectly; Applicable measures of explained variance are not included; Important results are omitted; Assumptions are not checked or checked/evaluated incorrectly; Results are included by copying/embedding R output.

Results are reported in a sensible style and interpreted correctly; Appropriate measures of explained variance are included and discussed; Assumptions are discussed and interpreted; Results are included as correctly typeset in-text statistics or as well-formatted tables or figures.

All (and only) relevant results are reported and interpreted; Extra attention is applied to formatting tables and figures to optimize clarity; The selection of reported results shows a clear understanding of what information is important.

#### 5. Discussion of results

The research question is not answered; The results is repeated without any additional interpreted or discussion to link the results to the RQ.

Results are discussed clearly, and the RQ is clearly answered through this discussion; Strengths and limitations of the analysis are considered.

The discussion is especially nuanced and insightful (e.g., tying up all "loose ends" by cogently linking each aspect of the results with the RQ); The discussion of strengths and limitations shows a clear understanding of the relative importance of different design decisions and justifies the trade-offs made in the analysis.

#### Formatting & Submission

Gross differences from the required format (e.g., wrong file type, missing sections, submitting multiple files, missing title page or information thereon).

All formatting and submission procedures satisfied.

N/A