

ISEM Assignment 2: Structural Equation Modeling

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 two latent factors); 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. CFA model estimation		
Analysis script and/or lavaan syntax snippets are not provided; The estimates reported do not match the code provided.	The model defined by the analysis script and lavaan syntax snippets matches the hypothesized measurement model and matches the reported results; Relevant syntax is provided, and very little extraneous code is included.	The analysis script and lavaan syntax snippets are formatted and annotated especially clearly; No extraneous syntax is included.
4. Reporting and interpret CFA		
Results not interpreted or interpreted incorrectly; Applicable measures of explained variance are not included; Applicable measures of model fit 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 and model fit 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. SEM model estimation		
Analysis script and/or lavaan syntax snippets are not provided; The estimates reported do not match the code provided.	The model defined by the analysis script and lavaan syntax snippets correctly answers the research question and matches the reported results; Relevant syntax is provided, and very little extraneous code is included.	The analysis script and lavaan syntax snippets are formatted and annotated especially clearly; No extraneous syntax is included.
6. Reporting and interpreting SEM		
Results not interpreted or interpreted incorrectly; Applicable measures of explained variance are not included; Applicable measures of model fit are not included; Important results are omitted; Results are included by copying/embedding R output.	Results are reported in a sensible style and interpreted correctly; Appropriate measures of explained variance and model fit are included and discussed; 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.
7. Discussing findings		
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 redundant files, missing author information).	All formatting and submission procedures satisfied.	N/A