| Reproducibility Checklist         |  |  |  |
|-----------------------------------|--|--|--|
| DOI:                              |  |  |  |
| Open Methodology & Documentation  |  |  |  |
| Clear Research<br>Methodology     | Is the research methodology explicitly stated?   |  |  |
| Step-by-step description          | Is there a step-by-step description of the study design?   |  |  |
| Data Accessibility & Transparency |  |  |  |
| Open Data                         | Are the raw or processed datasets publicly available or has it been mentioned where the data can be found?                 |  |  |
|                                   | If data cannot be shared, is there a clear justification (e.g., privacy concerns)?   |  |  |
| Data Documentation                | Is there a data dictionary or codebook explaining variables, formats, and preprocessing steps?                             |  |  |
| Data Collection<br>Methods        | Are data collection methods fully described?   |  |  |
| Code & Software Availability      |  |  |  |
| Open Source Code                  | Is the analysis code (Python, R, etc.) shared in an open repository (GitHub, GitLab) or somewhere else publicly available? |  |  |
|                                   | If code cannot be shared, is there a clear justification?  |  |  |

| Code for Data preparation        | Is code for data preparation (e.g. pre-processing) shared/mentioned?                    |  |  |
|----------------------------------|---|--|--|
|                                  |   |  |  |
| Type of Analysis                 |   |  |  |
| Quantitative<br>Research Methods | Are statistical tests, models, and assumptions clearly described?                       |  |  |
|                                  |   |  |  |
|                                  | Are effect sizes, confidence intervals, and p-values reported?                          |  |  |
|                                  |   |  |  |
| Qualitative<br>Research Methods  | Is subjective context and interpretation given?   |  |  |
|                                  | Is data coding and analysis clearly described and shared?                               |  |  |
| Results & Interpretation         |   |  |  |
| Clearly presented<br>Results     | Have the results been clearly documented?   |  |  |
| Limitations and potential biases | Are limitations and potential biases discussed?   |  |  |
|                                  |   |  |  |
| Preregistration                  |   |  |  |
| Preregistration                  | Does the Paper contain a link to the preregistration (e.g the Open Science Foundation)? |  |  |
|                                  |   |  |  |