The living-SEB-app, a Shiny app for meta-synthesis of SEB literature.

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The livingSEBapp (https://feracoshiny.shinyapps.io/livingSEBapp/) is a free and open-source Shiny app that allows for data synthesis of peer-reviewed publications that used the Behavioral, Emotional, and Social Skills Inventory (BESSI) in their research. The app should be viewed as a rapid tool for data synthesis, effect size visualization, and Bayesian priors and hypotheses building. It should not be intended as a systematic meta-analysis and its results should not be considered as the output of a complete meta-analysis of the literature (though they should be very similar). To conduct a systematic meta-analysis, the open-source data could be a starting point, but it might be necessary to include additional information (e.g., moderators of interest) and run more detailed and tailored analysis.

Below, the different functions of the app are described to guide the user toward a correct and efficient usage of the livingSEBapp.

Running a meta-analysis of the associations between SEB domains and their correlates

A first utility of the app is the possibility to run a rapid synthesis of the associations between the five SEB domains and each correlate measured more than one time in the literature. Specifically, the app allows for the estimation of the meta-analytical association between the five SEB domains and one 'outcome' at the time. Multivariate associations are not handled at the moment.

The steps to conduct such analysis are here detailed:

1. **Select the data of interest:**

   - Using the tab on the left of the screen, you can select the broad group of outcomes and, within it, the specific outcome you want to analyze. By default, 'schoool' -> 'academic achievement' is selected as outcome of the meta-analysis. The complete list of outcomes and groupings is available in the matrix codebook.

   - If you want to filter the data you can do it by selecting the data you are interested in based on the year of publication and at the age category of the sample. More filters

might be added in the future.

- Everytime you select an outcome or filter the data, basic information about the data available for the meta-analysis -given the selections- is provided in the main Tab.

- When the selection is completed, you can proceed to the next step of the analysis.

2. **Run the meta-analysis:**

- Once you selected the outcome of interest and filtered the data, move to the next tab 'Meta results'

- In the 'Meta results' page, you can easily meta-analize the associations between SEB domains and the outcome, just by clicking the box "Run the meta-analysis"

- This will generate a summary table with descriptive statistics for each skill (e.g., k samples, total N) and the meta-analytical results, including precision of the estimates and heterogeneity information. The five meta-analytical back-transformed correlations and associated confidence intervals.

3. **Check forest plots:**

- To descriptively inspect forest plots of each specific meta-analytical association, move to the 'Forest plots' tab.

- From the 'Select the skill' list available, please select the skill of interest. The corresponding forest plot will be authomatically showed.

4. **Export a report of the results:**

- Moving to the 'Report' tab, you can download an html file with the current results and a detailed description of the analyses conducted.

Running a meta-SEM using the metaSEM package

Discussion

Limitations and Future Directions

- Expand the meta-analysis to specific skill facets

Conclusion

Appendix A

This Section Is an Appendix

Appendix B

Another Appendix