



# PIVOT TABLES

Use this panel to build pivot tables and charts from your project data with a simple drag-and-drop interface. Three subtabs: **Pivot table**, **Summary** (one-dimensional heatmaps for categorical vars with <10 categories, mean/median for continuous), and **All-by-all checks** (pairwise significance tests).

Example bookmark:

- [Comparing groups \(gender\) — heatmap pivot table](#)

## Quick start

This panel is powered by PivotTable.js, which generates most of the UI dynamically. These are the **actual widgets** you can see/use:

1. 🖱️ **(Links / Factors / Sources)** (Dropdown): *Which table to analyse?* — chooses which dataset to pivot.
2. 🖱️ **(After pipeline / Before pipeline)** (Radio buttons): *Which stage to analyse?* — chooses post-pipeline (matches other panels) vs raw data for the chosen dataset.
3. 🖱️ **(Refresh)** (Button): reloads + re-renders the pivot with latest data.
4. 🖱️ **(Sig level)** (Dropdown): significance threshold for 2-way table tests (0.10, 0.05, 0.01, 0.001).
5. 🖱️ **(Copy to Clipboard)** (Button): copies the current pivot table/chart as an image.
6. 🖱️ **(Copy as Table)** (Button): copies the pivot as tab-separated text — paste into Excel/Sheets to get a properly aligned table (**Table renderer only**).
7. 🖱️ **(Download XLSX)** (Button): downloads the current pivot as **.xlsx** (**Table renderer only**).  
Merged cells (rowspan/colspan) are expanded so columns align correctly.
8. 🖱️ **(Help)** (Button): opens help for Pivot Tables.
9. 🖱️ **(Search fields)** (Text field): searches the available field/column names in the drag-and-drop list.
10. 🖱️ **Drag-and-drop fields** (field chip list): shows available fields (columns). Drag a field chip into **Rows**, **Cols**, or **Vals**.
11. 🖱️ **(Rows / Cols / Vals)** (Drag-and-drop drop zones): defines how the pivot is laid out and what values are summarised.
12. 🖱️ **(Aggregator)** (Dropdown): chooses the aggregation function (e.g. **Count**, **Sum**, **Average**).
13. 🖱️ **(Vals)** (Dropdown): chooses the numeric field to aggregate (only appears for aggregators that need it).
14. 🖱️ **(Renderer)** (Dropdown): chooses the output type (table, heatmaps, Plotly charts).
15. 🖱️ **(Row Order / Col Order)** (Dropdowns): chooses how row/column keys are sorted.
16. 🖱️ **(Filter popup on each field chip)** (Popup): include/exclude values for that field.

17. 🖱️ **(Search)** (Text field): searches within the field's value list.
18. 🖱️ **(Checkbox list)**: ticks/unticks specific values.
19. 🖱️ **(x on a field chip)** (Button): removes that field from **Rows/Cols/Vals**.

## Arrange fields (drag and drop)

- 🖱️ **(Search fields)**: type part of a column name to narrow the available field list.
- 🖱️ **Drag-and-drop list**: the “pool” of fields you can use.
- 🖱️ **(Rows)** (Drop zone): fields listed down the left side of the output.
- 🖱️ **(Cols)** (Drop zone): fields listed across the top of the output.
- 🖱️ **(Vals)** (Drop zone): numeric field(s) to summarise (when needed by the chosen aggregator).
- 🖱️ **(Drag within a zone)**: reorders fields.
- 🖱️ **(x)** (Button): removes a field from a zone.

## Choose the calculation ("Aggregator")

- 🖱️ **(Aggregator)** (Dropdown): chooses how each cell is calculated. **Optional** — you can leave this at the default **Count** (no additional variable needed).
- 🖱️ **(Count)**: how many rows fall into each cell.
- 🖱️ **(Sum / Average / Min / Max)**: summarises a numeric field.
- 🖱️ **(Unique Count)**: counts distinct values of a field.
- 🖱️ **(Vals)** (Dropdown): choose which numeric field to summarise (**optional**, only shown when needed).

## Filter or exclude values

- 🖱️ **(Filter popup on a field chip)** (Popup): include/exclude values for that field.
- 🖱️ **(Search)** (Text field): narrows the value list.
- 🖱️ **(Checkbox list)**: include/exclude specific values (includes a “select all” control).

## Sorting

- 🖱️ **(Row Order)** (Dropdown): sorts row keys (e.g. by key or by value, depending on the option).
- 🖱️ **(Col Order)** (Dropdown): sorts column keys.

## Heatmaps and charts

- 🖱️ **(Renderer)** (Dropdown): switches between:
- 🖱️ **Heatmaps** (e.g. **Heatmap**, **Row Heatmap**, **Col Heatmap**)
- 🖱️ **Plotly charts** (e.g. **Bar**, **Line**, **Scatter**, **Stacked Bar**, **Area**, **Multiple Pie**)

## Export and sharing

- 🖱️ **(Copy to Clipboard)** (Button): copies the current pivot output as an image.

- 🖱️ (**Copy as Table**) (Button): copies the pivot as TSV — pastes as a correctly aligned table in Excel or Google Sheets (**Table renderer only**).
- 🖱️ (**Download XLSX**) (Button): exports the pivot table to `.xlsx` with merged cells expanded so columns align (**Table renderer only**).
- 🖱️ (**URL state**): the pivot configuration is saved to the URL automatically, so you can bookmark/share it.

## Significance testing

When you build a **2-way count table** (one field in Rows, one in Cols, Count aggregator), the app runs a statistical test and shows the result below the table.

- **Sig level** (dropdown): choose your significance threshold (0.10, 0.05, 0.01, or 0.001). The test result shows whether the association is significant at that level.
- **Which test?** The app picks the right test for your data:
- **Chi-squared** when both variables are nominal (e.g. categories with no natural order).
- **Mantel** (linear-by-linear) when one or both variables are ordinal (e.g. Likert scales, age bands). This test is more sensitive to ordered trends.
- **All-by-all checks**: below the pivot, tick **Run all-by-all checks** and click **Run**. The app tests every pair of categorical variables with 2–10 values, lists them by p-value, and shows heatmap tables for the significant ones. Useful for exploratory analysis when you have several group or rating variables.

## Notes on the datasets

- **Links**: every causal link plus metadata; includes AI fields (e.g. confidence) and reserved columns like `original_cause`, `original_effect`.
- **Factors**: unique factors with frequency, source count, citations, and `original_label` (ALL underlying original labels for the displayed factor, concatenated with line breaks, derived from the current stage's links like `original_cause/effect`).
- **Sources**: document metadata and flattened custom fields (`custom_*`).

💡 Tip: For results that match other panels, use **After Analysis Pipeline**.