

Starting off in JASP: Interface, labels, data and output management

Make sure you have downloaded JASP first – you can download it on a PC or Mac for free by going to <https://jasp-stats.org/download/>

Importing and opening data

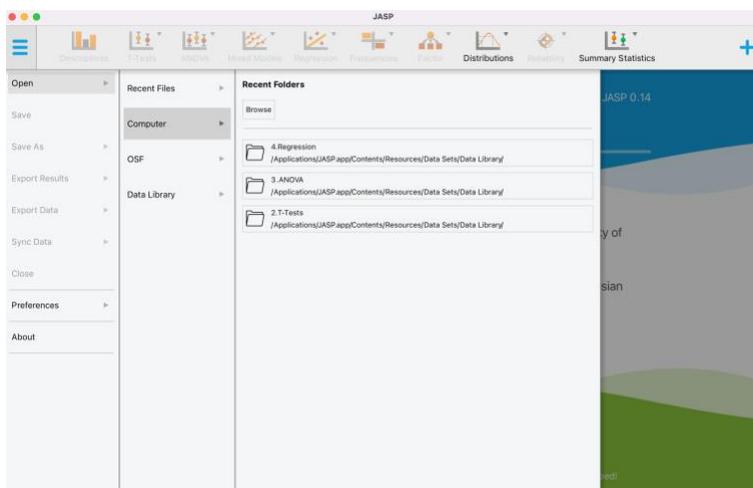
JASP supports data files from SPSS (.sav), SAS (.sas7bdat), Stata (.dta), Open Document Spreadsheet format (.ods), and Excel or text (.csv, .txt).

It is recommended you clean your data in the above programs first (i.e., look for data entry mistakes) before importing data into JASP. Any edits to the actual data set that you want to make will need to be made through the external program (SPSS, Excel, etc.). More on this soon.

When you first open JASP, it will look like this:

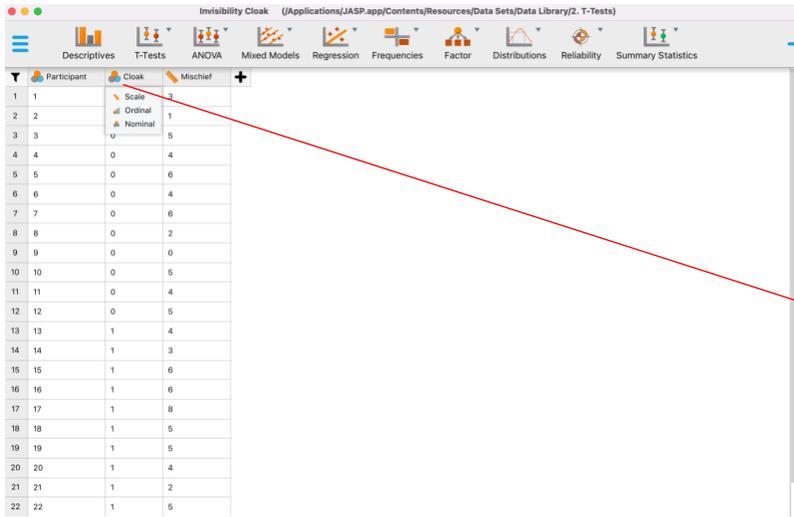


To open a data set, you will want to click on the three lines that look a bit like a hamburger, which gets you the options shown below.



When you click on “open”, you can choose a location of your files. “Recent Files” and “Computer” are your personal documents. OSF stands for “Open Science Framework”, which allows you to share and access data sets other researchers shared. “Data library” is a collection of data sets that come with JASP to illustrate each analysis you may run – go ahead and explore!

Data View and Labels

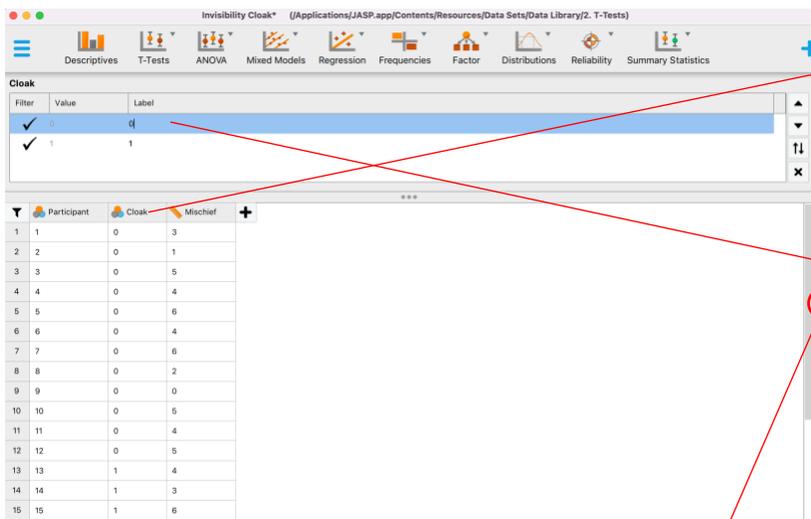


Participant	Cloak	Mischief
1	0	3
2	0	1
3	0	5
4	0	4
5	0	6
6	0	4
7	0	6
8	0	2
9	0	0
10	0	5
11	0	4
12	0	5
13	1	4
14	1	3
15	1	6
16	1	6
17	1	8
18	1	5
19	1	5
20	1	4
21	1	2
22	1	5

An open data file will look something like this.

As in Excel or SPSS, your variables are in columns and your cases are in rows.

JASP *guesses* the measurement level of your data, so you should always check it. You can change it by clicking on the little icon in front of the variable name and then choosing the appropriate option



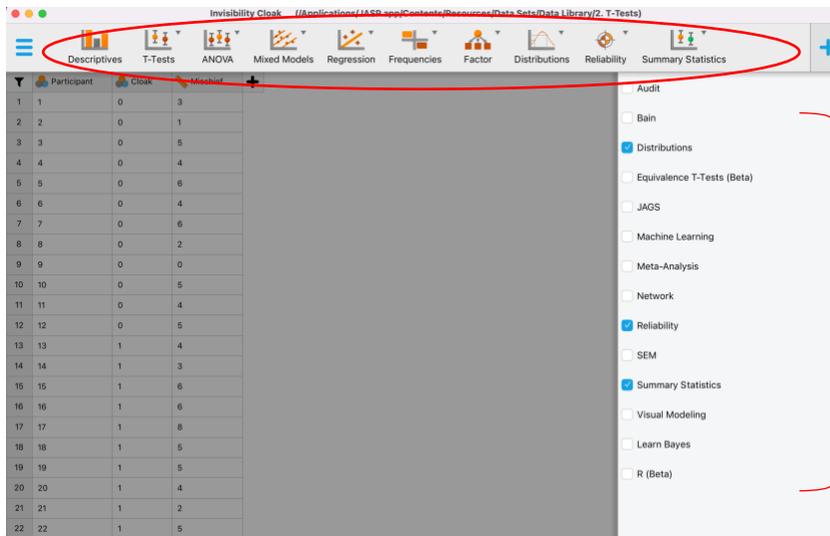
Filter	Value	Label
<input checked="" type="checkbox"/>	0	q
<input checked="" type="checkbox"/>	1	1

Participant	Cloak	Mischief
1	0	3
2	0	1
3	0	5
4	0	4
5	0	6
6	0	4
7	0	6
8	0	2
9	0	0
10	0	5
11	0	4
12	0	5
13	1	4
14	1	3
15	1	6

Clicking on the variable name itself will open a window above the data file in which you can edit what you want to label the different levels of your variables

E.g., I may wish to change “0” to “no cloak” and “1” to “cloak” so that my output is generated using those easy-to-understand labels and I can see descriptive Statistics by group without having to remember what “0” and “1” meant

Once you have clicked on an analysis, this tiny triangle allows you to toggle back and forth between the data view and the test options & output view (see below for more).

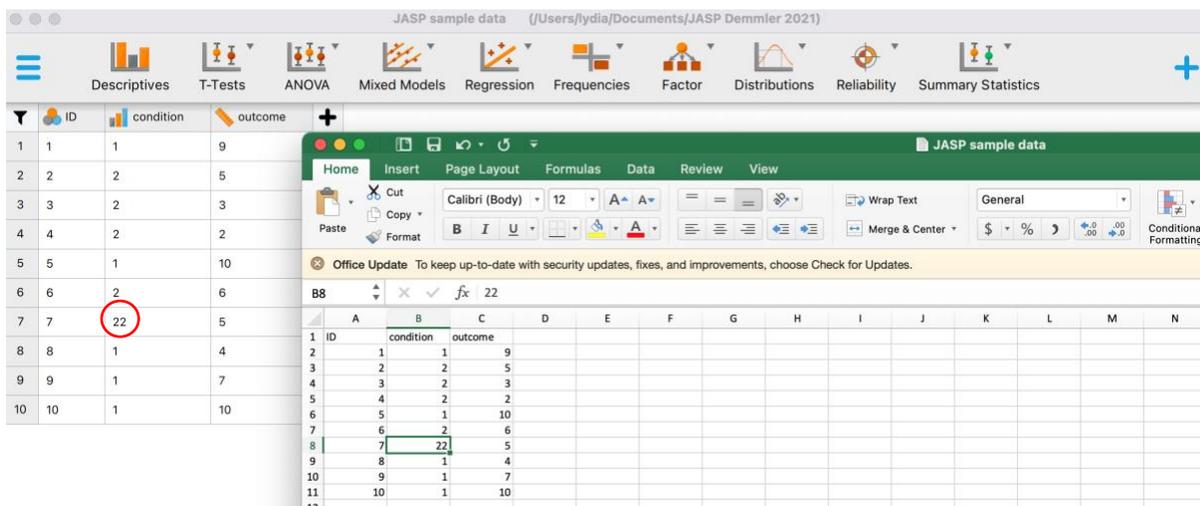


All available analyses show up in this top row here

If you want to add an analysis, you can click the + in the top right corner and choose what you wish to add from this drop-down menu

Data editing

Generally speaking, you should plan to do your data cleaning and editing in the original file before importing it to JASP. Data editing in JASP is possible, but only through a cumbersome, roundabout way for now. Say, for example, you open your data set and notice you made a data entry mistake (or notice something else you want to change). E.g., in the data set below, the condition ought to be a “2”, not a “22”. If you double-click on the data, the data editor sheet will open in your external program (if you imported a .csv file, this should be Excel on a PC; a Mac is more tricky...read below.) You can now make your changes in Excel, and *as you save the change in Excel*, JASP will update its data file in real time.



Mac users:

- IF you have Excel on your Mac, open the .csv file you imported to JASP in Excel and keep it open. Any changes you make in there *and save* should then be reflected in JASP.
- If you don't have Excel, double-clicking will open the data in Numbers. The only workaround I found is to make the edits, and re-save the fixed Numbers file as a new .csv file that you then have to import again into JASP.

Test options & output view

Once you have clicked on an analysis, a divided screen opens up that shows your analysis options on the left, and your output on the right.

As soon as you click on options on the left, the output on the right changes accordingly and “in real time”, so you can see whatever options you add right away

The screenshot shows the JASP interface with the 'Descriptive Statistics' panel on the left and the 'Invisibility Cloak: Descriptive Statistics' output on the right. The 'Statistics' section in the left panel has a red circle around the right-pointing arrow, with a red arrow pointing to a text box that says 'This allows you to toggle back to the data view'. The output on the right shows a table of descriptive statistics for 'Cloak' and 'Mischief'.

Descriptive Statistics

	Cloak	Mischief
Valid	24	24
Missing	0	0
Mean	0.500	4.375
Median	0.500	5.000
Mode	0.000	5.000
Std. Deviation	0.511	1.861
Range	1.000	8.000
Minimum	0.000	0.000
Maximum	1.000	8.000

* More than one mode exists, only the first is reported

Frequency Tables

Frequencies for Cloak

Cloak	Frequency	Percent	Valid Percent	Cumulative Percent
no cloak	12	50.000	50.000	50.000
cloak	12	50.000	50.000	100.000
Missing	0	0.000		
Total	24	100.000		

Here is your output, organized by variable

This allows you to toggle back to the data view

The screenshot shows the JASP interface with the 'Descriptive Statistics' panel on the left and the 'Invisibility Cloak: Descriptive Statistics' output on the right. The 'Split' field in the left panel is set to 'Cloak', with a red arrow pointing to a text box that explains this action. The output on the right shows a table of descriptive statistics for 'Mischief' split by 'Cloak'.

Descriptive Statistics

	Mischief	
	no cloak	cloak
Valid	12	12
Missing	0	0
Mean	3.750	5.000
Median	4.000	5.000
Mode	4.000	5.000
Std. Deviation	1.913	1.651
Range	6.000	6.000
Minimum	0.000	2.000
Maximum	6.000	8.000

* More than one mode exists, only the first is reported

* Note, you could split the output by condition if you move “cloak” from the variables field to the “split” field, like I did here. Now your output lists the descriptives for each condition, rather than averaging across them

* Cool tidbit: JASP reminds you you can only split by nominal or ordinal variables (because those denote groups) by showing you these little symbols (circles = nominal, bars = ordinal)

Labeling your analyses to keep track of them

The screenshot shows the JASP software interface with two analysis windows stacked. The top window is titled "Descriptive Statistics of Invisibility Cloak Data" and the bottom window is titled "Independent Samples T-Test". A red circle highlights the control icons (black pen, green plus, blue i, red x) next to the analysis titles. A red arrow points from the "Independent Samples T-Test" control icons to the text below.

	Mischief	
	no cloak	cloak
Valid	12	12
Missing	0	0
Mean	3.750	5.000
Median	4.000	5.000
Mode	4.000	5.000
Std. Deviation	1.913	1.651
Range	6.000	6.000
Minimum	0.000	2.000
Maximum	6.000	8.000

Independent Samples T-Test			
	t	df	p
Mischief	-1.713	22	0.101

Notice that JASP “stacks” all analyses you run here. For example, I ran some descriptive Statistics and then clicked on a t-test, so it added a second window here. By clicking on the little arrow right before the title of the analysis, you can hide or show the details of your analyses. Here, for descriptive Statistics, the arrow points right, so the details of the analysis are hidden, the arrow for Independent Samples T-Test points down, so I can see the details of the analysis.

Let’s zoom in on the symbols right next to the analysis titles:

The close-up screenshot shows the control icons (black pen, green plus, blue i, red x) next to the analysis titles "Descriptive Statistics of Invisibility Cloak Data" and "Independent Samples T-Test". A red circle highlights these icons.

Clicking on the **black pen** allows you to edit the title of your analysis

Clicking on the **green +** copies this analysis to the bottom of the stack and you can now rename this and choose some different options (e.g., you may want to run descriptive Statistics by group as I did above)

Clicking on the **blue i** opens a window that explains the analysis you are about to run, and all its options, in more detail (nice little 207 refresher!)

Clicking on the **red x** deletes this analysis from the stack.