

## Tutorial 2: Introduction to Jamovi

### Description

In this tutorial we will provide a brief description of what Jamovi is and how to navigate the user interface.

### What is Jamovi?

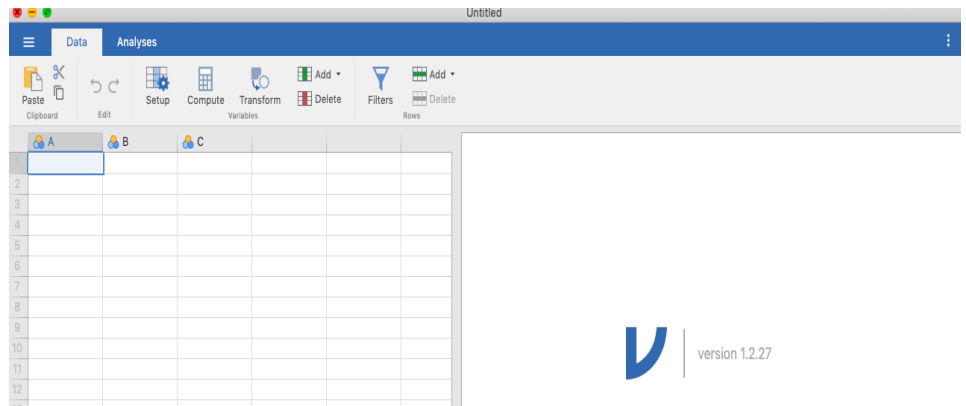
Now that you know a little bit about the study we will be using for these tutorials. Let's get started with Jamovi. Jamovi is an open source statistical program that uses the coding language R to calculate the statistics. Jamovi makes R user friendly because we can use point and click commands rather than coding to calculate our stats. Jamovi is free, open, and really user friendly.

### Navigating the User Interface

You already have Jamovi installed on your computer. When you open Jamovi, you see a spreadsheet with rows and columns that are blank.

→→→→→

To open a data file-  
you have to click on  
the hamburger symbol  
in the top left corner

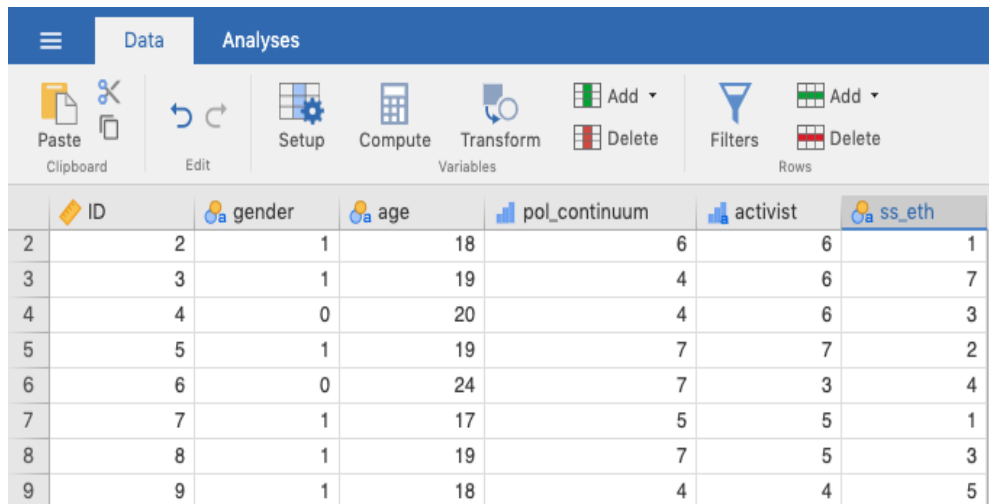


New  
Open  
Import  
Save  
Save As  
Export

We are going to open a data file called ARMF2020\_6vars.omv where we have the data collected from the Adv Research Methods class -Social Media Attitudes study. We are going to only have some of the data here so we can just go through

some basics. Notice that the Jamovi data files have the extension .omv

Notice below that you have 3 tabs now. The hamburger icon leads you to where you can open, save files and the data tab, the one that is highlighted is where we see our actual spreadsheet of data and the Analyses tab is where we can pick our stats commands. We are going to stay on the data tab for a bit.



	ID	gender	age	pol_continuum	activist	ss_eth
2	2	1	18	6	6	1
3	3	1	19	4	6	7
4	4	0	20	4	6	3
5	5	1	19	7	7	2
6	6	0	24	7	3	4
7	7	1	17	5	5	1
8	8	1	19	7	5	3
9	9	1	18	4	4	5

Columns are where you have the variables (the

participants responses to your questions and experimental conditions). Each row is each participants' responses and the condition they were placed in.

ID is the number we attached to each participants' data. So going across is participant 2's responses to our questions on gender, age, and their answer to a question on a scale from 1 to 7 how strongly conservative to strongly liberal they are - we called that pol\_continuum. Activist is their own rating of themselves on a scale from 1 to 7 on how strongly they identify as a social activist with 1 being very low and 7 being very high. The last variable here is their ethnicity. They were given 6 categories and speech of these numbers correspond to the category they chose. The 7th one was 'other' and they could specify in a text box their ethnicity if they wanted to if they felt like the categories did not apply to them.

Notice the symbols next to each of the variable names. Gender and ethnicity are nominal so they have the circles, activist and political attitudes are technically ordinal and have the bar graphs and in Jamovi, they will be treated as interval data.

When you click on anywhere on a variable column, you can then click up on top 'Setup' you add more information about your variables.

Let's look at gender

The screenshot shows the SPSS interface. The top menu bar includes 'Data' and 'Analyses'. Below the menu is a toolbar with icons for 'Paste', 'Edit', 'Setup', 'Compute', 'Transform', 'Add', 'Delete', 'Filters', and 'Delete'. The main window is split into two panes. The top pane is 'DATA VARIABLE' for the variable 'gender'. It shows the variable name 'gender' and its full name 'participant gender'. The 'Measure type' is set to 'Nominal' and the 'Data type' is 'Text'. The 'Missing values' field is empty. To the right is a 'Levels' table:

Level	Value
0 Male	0
1 Female	1
2 Non Binary	2

Below the panes is a data grid with columns: ID, gender, age, pol\_continuum, activist, and ss\_eth. The 'gender' column contains values 0, 1, and 2 corresponding to the levels defined above.

ID	gender	age	pol_continuum	activist	ss_eth
1	0 Male	22	1	1	1
2	1 Female	18	6	6	1
3	1 Female	19	4	6	7
4	0 Male	20	4	6	3
5	1 Female	19	7	7	2
6	0 Male	24	7	3	4
7	1 Female	17	5	5	1
8	1 Female	19	7	5	3
9	1 Female	18	4	4	5
10	1 Female	18	6	6	6
11	1 Female	19	6	4	3

You input the number values and the labels for each. So when participants' clicked male in the survey, the spreadsheet recorded a 0 for their answer. You have to create the labels for the numbers here.

For activist and political attitude you can label the scale (strongly disagree to strongly agree).

For activist ratings, we still need to add the value labels for the scale 1-7.

The reason for doing this is so that when you run stats tests, the labels will help you know what your data is about. We have another tutorial on how to run frequencies but here you can see that the labels were helpful to understand the numbers for each gender category.

DATA VARIABLE

activist

Description

Measure type **Ordinal**

Data type **Text**

Missing values

Levels

1

2

3

4

5

Retain unused levels

ID	gender	age	pol_continuum	activist	ss_eth
1	0 Male	22	1	1	1
2	1 Female	18	6	6	1
3	1 Female	19	4	6	7
4	0 Male	20	4	6	3
5	1 Female	19	7	7	2
6	0 Male	24	7	3	4
7	1 Female	17	5	5	1
8	1 Female	19	7	5	3
9	1 Female	18	4	4	5
10	1 Female	18	6	6	6
11	1 Female	19	6	4	3
12	0 Male	19	6	5	6
13	1 Female	19	7	5	6

gender	
N	121
Missing	0
Mean	
Median	
Minimum	
Maximum	

## Frequencies

Frequencies of gender

Levels	Counts	% of Total	Cumulative %
0 Male	26	21.5%	21.5%
1 Female	90	74.4%	95.9%
2 Non Binary	5	4.1%	100.0%

Now let's explore the Analysis tab. On the top are 6 commands:

First one is Exploration - underneath Explorations it says 'Descriptives'

The screenshot shows the JAMOVI software interface. The top navigation bar includes 'Data' and 'Analyses' tabs. Under 'Analyses', there are icons for Exploration, T-Tests, ANOVA, Regression, Frequencies, and Factor. The 'Exploration' icon is selected, and a sub-menu 'Descriptives' is visible. The main workspace is divided into three sections: 'Descriptives' on the left, a central workspace, and a right-hand panel. The right-hand panel displays the 'Frequencies' table and the 'Descriptives' section.

**Descriptives**

Variables: ID, gender, age, pol\_continuum, activist, ss\_eth

Split by:

Frequency tables

> | Statistics

> | Plots

**Frequencies**

Frequencies of gender

Levels	Counts	% of Total	Cumulative %
0 Male	26	21.5%	21.5%
1 Female	90	74.4%	95.9%
2 Non Binary	5	4.1%	100.0%

**Descriptives**

Descriptives

N

Missing

Mean

Median

Minimum

Maximum

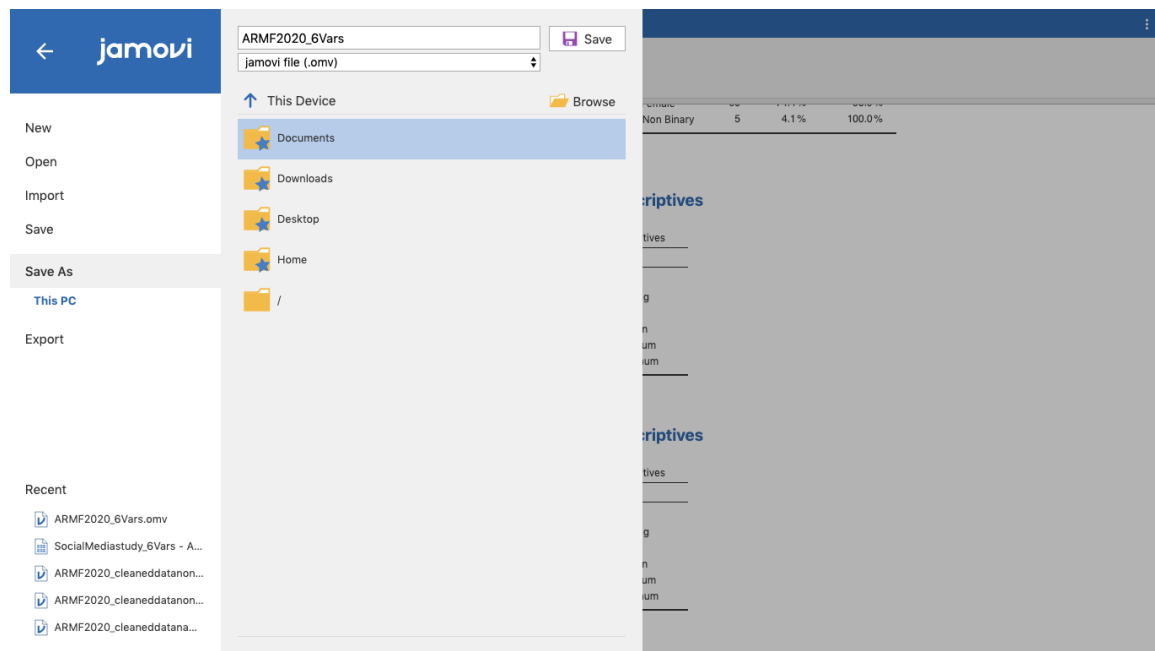
**References**

[1] The jamovi project (2020). *jamovi*. (Version 1.2) [Computer Software]. Retrieved from <https://www.jamovi.org>.

The other menus are more advanced stats analyses - like ANOVA, T-Tests, Regression, and Frequencies. We will have separate tutorials for these.

Last Step- you need to save your data file!

Go to the hamburger menu and save your file- it will contain your spreadsheet and any analyses you did.



-----END TUTORIAL-----

**This Jamovi tutorial is a companion to a video tutorial and these materials were developed by:**

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