

Análisis estadístico con Jamovi aplicado a Enfermería y CAFE

Parte I: Lectura y transformación de variables

Juan R Gonzalez

Bioinformatics Research Group in Epidemiology,
Barcelona Institute for Global Health (ISGlobal)
and

Department of Mathematics,
Autonomous University of Barcelona (UAB)

<http://brge.isglobal.org>

Jamovi

Datos

Resultados, gráficas , ...

The screenshot displays the Jamovi software interface. At the top, there is a blue header bar with a hamburger menu icon on the left, followed by two tabs: 'Data' and 'Analyses'. Below the header, a light gray toolbar contains six icons with labels: 'Exploration' (bar chart), 'T-Tests' (t-test symbol), 'ANOVA' (ANOVA symbol), 'Regression' (line graph), 'Frequencies' (four squares), and 'Factor' (hierarchy diagram). The main workspace is a grid with three columns labeled 'A', 'B', and 'C' at the top. The first column 'A' is highlighted with a blue border, and the first row is numbered 1 through 17 on the left side. A red arrow points from the 'Datos' label to the first cell of column A. Another red arrow points from the 'Resultados, gráficas , ...' label to the right side of the grid.

Variables

The screenshot shows a software interface with a blue header bar containing a menu icon and two tabs: 'Data' and 'Analyses'. Below the header is a toolbar with icons for 'Exploration', 'T-Tests', 'ANOVA', 'Regression', 'Frequencies', and 'Factor'. The main area is divided into two sections. The top section, titled 'DATA VARIABLE', contains a text box with 'A', a 'Description' field, and a list of variable types: 'Continuous', 'Ordinal', 'Nominal' (selected), and 'Nominal Text (auto adjusting)'. To the right of this list is a 'Levels' box with up and down arrows. Below the list is a checkbox labeled 'Retain unused levels'. The bottom section is a data table with columns labeled 'A', 'B', and 'C'. The first row of the table is highlighted in blue, and a red arrow points to it with the text 'doble-click'.

Analyses

Exploration T-Tests ANOVA Regression Frequencies Factor

DATA VARIABLE

A

Description

☐ Continuous

☐ Ordinal

☒ Nominal

☐ Nominal Text (auto adjusting)

Levels

☐ Retain unused levels

doble-click

	A	B	C			
1						
2						
3						
4						
5						

Estudio: test condición física

- Sexo
 - ☐ Niño
 - ☐ Niña
- Edad: _____ años
- IMC: _____ kg/m²
- IPAQ: _____
- Abdominals (en 30 s): _____
- Salt: _____ m
- Velocitat (10x5) _____ seg

Estudio: test condición física

Test_Condicion_Fisica

Inicio Insertar Diseño de página Fórmulas Datos Revisar Vista

Cortar Copiar Pegar Copiar formato Portapapeles Fuente Alineación

A72 f_x d

	A	B	C	D	E	F	G
	Sexe	Edat	IMC	IPAQ	Abdominals	Salt	Velocitat
1	h	19	26	7121	30	2	18
2	h	20	19,5	6534	21	2,72	20,2
3	h	19	24	7652	25	2	17,5
4	h	18	21	7989	28	2,34	18
5	h	25	23,24	6120	29	2	18,28
6	h	20	24,69	47,6	26	2,06	16,39
7	h	22	23,45	5312	25	2	16,41
8	h	22	20,98	4856	27	2,38	16
9	h	22	21,91	4932	24	2,1	16,3
10	h	20	24,2	7857	15	2,73	22,72
11	h	28	23,5	9732	34	2	16,22
12	h	19	20	6300	32	2	18,03
13	h	18	20,3	4266	30	2,31	7,88
14	h	22	22,3	7653	32	2,15	17,97
15	h	19	22,45	1200	22	1,95	16

Organizar

- Documentos
- Imágenes
- Música
- Videos
- Grupo en el hogar
- Equipo
- Windows8_OS
- Red

Nombre de archivo:

Tipo:

- Libro de Excel
- Libro de Excel habilitado para macros
- Libro binario de Excel
- Libro de Excel 97-2003
- Datos XML
- Página Web de un solo archivo
- Página Web
- Plantilla de Excel
- Plantilla de Excel habilitada para macros
- Plantilla de Excel 97-2003
- Texto (delimitado por tabulaciones)
- Texto Unicode
- Hoja de cálculo XML 2003
- Libro de Microsoft Excel 5.0/95
- CSV (delimitado por comas)
- Texto con formato (delimitado por espacios)
- Texto (Macintosh)
- Texto (MS-DOS)
- CSV (Macintosh)
- CSV (MS-DOS)
- DIF (formato de intercambio de datos)
- SYLK (vínculo simbólico)
- Complemento de Excel
- Complemento de Excel 97-2003
- PDF
- Documento XPS
- Hoja de cálculo de OpenDocument

Autores: jgarcia Etiquetas: Agregar una etiqueta

☐ Guardar miniatura

Ocultar carpetas Herramientas Guardar Cancelar

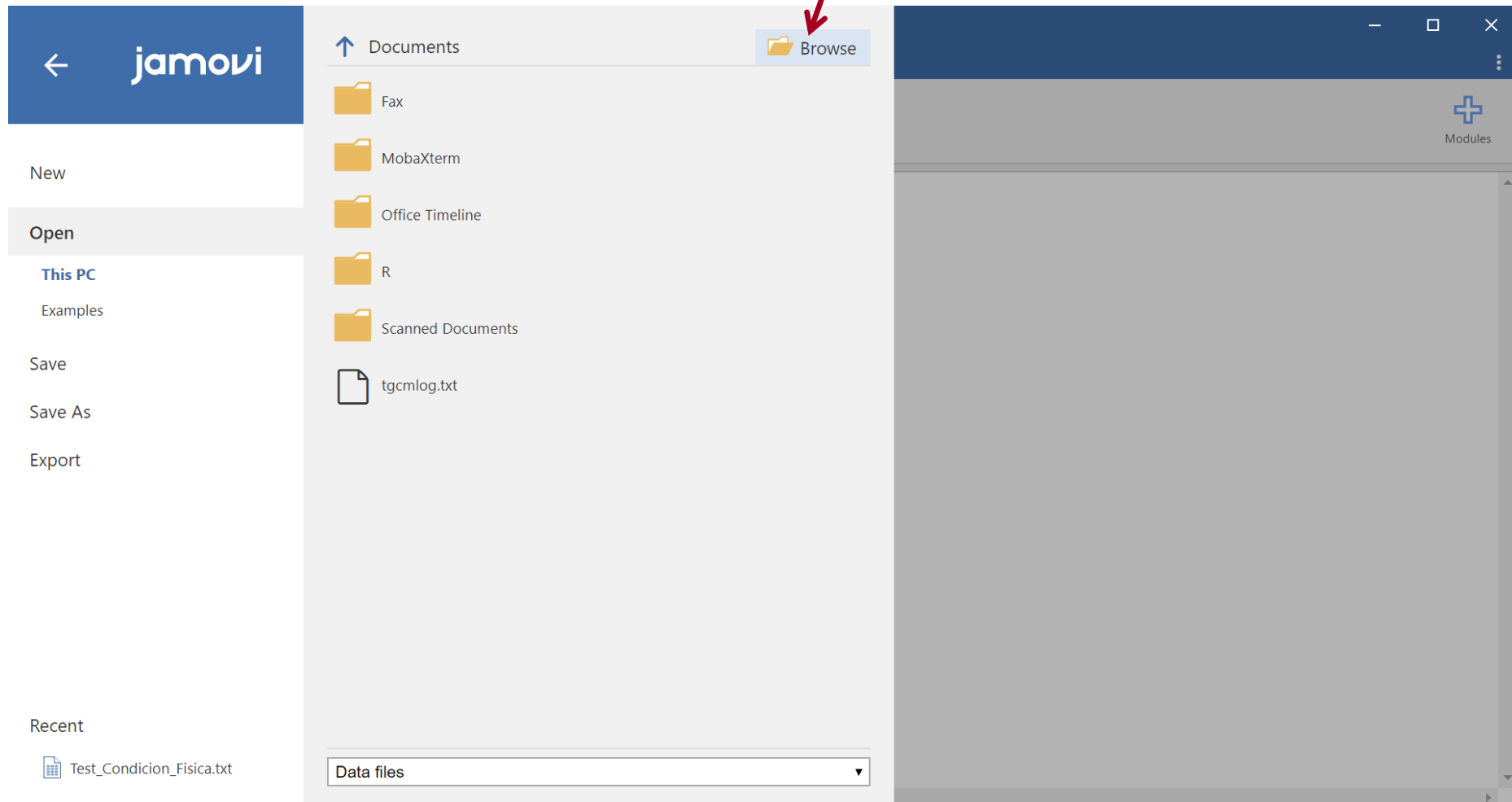
Importar datos

Importar datos

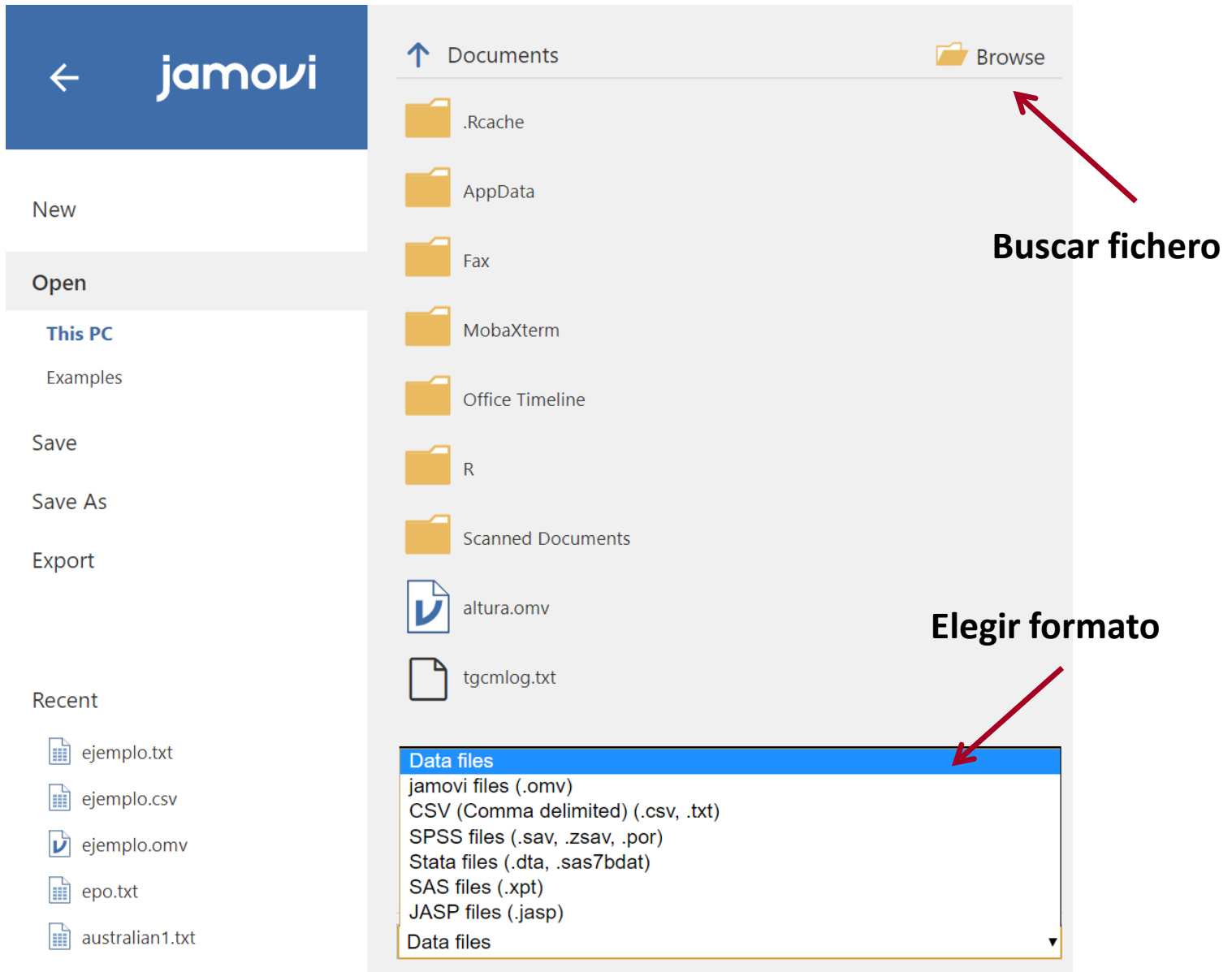
The screenshot displays the JAMOVI software interface. The top menu bar is blue and contains the text 'jamovi' on the right. Below the menu bar, there are two tabs: 'Data' and 'Analyses'. The 'Data' tab is active, and a red arrow points to its icon (three horizontal lines). Below the tabs, there is a row of icons for various statistical analyses: Exploration, T-Tests, ANOVA, Regression, Frequencies, and Factor. To the right of these icons is a 'Modules' button with a plus sign. The main area of the interface is a data grid. The grid has columns labeled 'A', 'B', and 'C' at the top. The first column 'A' is highlighted with a blue border. The grid contains 23 rows, numbered 1 to 23 on the left. The right side of the interface is a large, empty white area, likely for displaying results or visualizations.

Importar datos

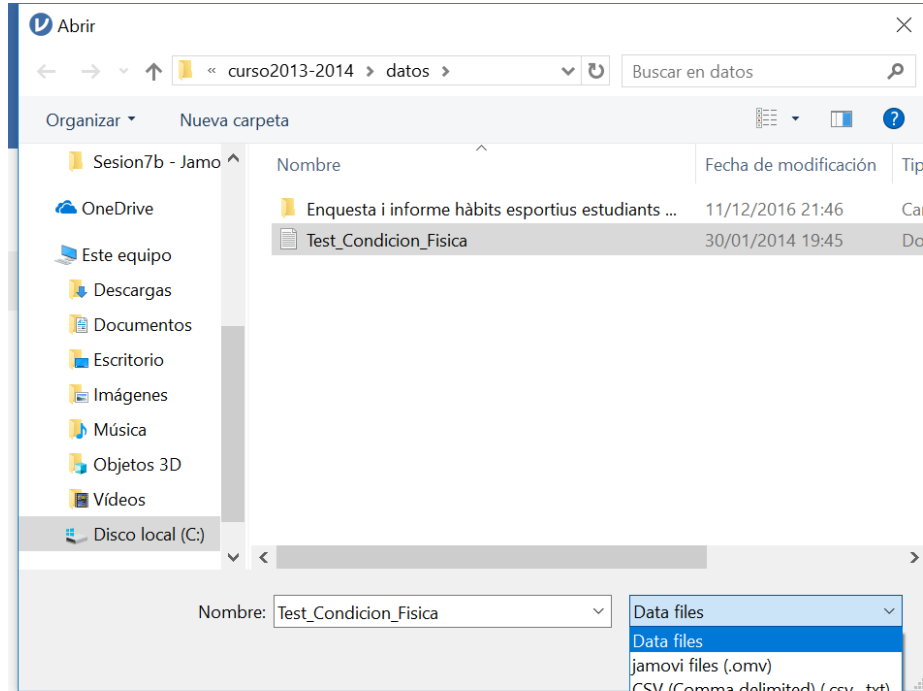
Buscar fichero



Importar datos



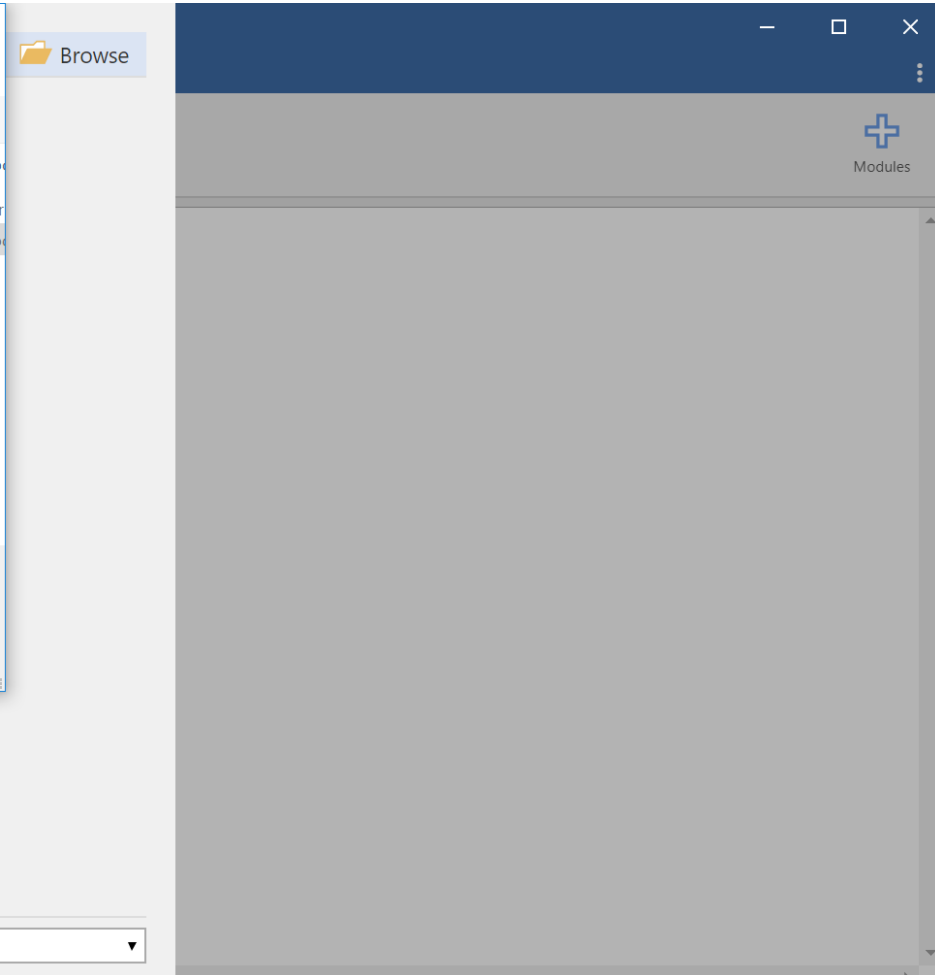
Importar datos



Recent

Test_Condicion_Fisica.txt

Data files



Datos en Jamovi

Variables



**Observaciones
(Sujetos)**



jamovi						
Data Analyses						
Exploration T-Tests ANOVA Regression Frequencies Factor Modules						
	Sexe	Edat	IMC	IPAQ	Abdomin...	Salt
1	h	19	26.00	7121.0	30	
2	h	20	19.50	6534.0	21	
3	h	19	24.00	7652.0	25	
4	h	18	21.00	7989.0	28	
5	h	25	23.24	6120.0	29	
6	h	20	24.69	47.6	26	
7	h	22	23.45	5312.0	25	
8	h	22	20.98	4856.0	27	
9	h	22	21.91	4932.0	24	
10	h	20	24.20	7857.0	15	
11	h	28	23.50	9732.0	34	
12	h	19	20.00	6300.0	32	
13	h	18	20.30	4266.0	30	
14	h	22	22.30	7653.0	32	
15	h	19	22.45	1200.0	22	
16	h	19	20.00	75.0	24	
17	h	22	26.90	4000.0	25	
18	h	19	20.00	5400.0	29	
19	h	19	20.68	4600.0	25	
20	h	18	20.29	6500.0	23	
21	h	30	24.07	3760.0	29	
22	h	19	20.45	3852.0	28	
23	h	18	21.40	9752.0	27	

Datos en Jamovi

The screenshot shows the Jamovi software interface. At the top, there are tabs for 'Data' and 'Analyses'. Below these are toolbars for 'Clipboard' (Paste, Copy), 'Variables' (Setup, Compute, Add, Delete), and 'Rows' (Filters, Add, Delete). The main area is titled 'DATA VARIABLE' and shows the variable 'Abdominals' with a 'Description' field. Below this, there are radio buttons for variable types: Continuous, Ordinal, Nominal (selected), and Nominal Text. To the right of these is a 'Levels' list containing the values 15, 18, 19, 20, and 21. At the bottom, a data table is visible with columns for 'IPAQ', 'Abdomin...', 'Salt', 'Velocitat', 'Abdomin...', and 'abd_zscore'. The first row of data shows values 7121.0, 30, 2.00, 18.00, 15, and 1.060. A red arrow points to the 'Abdomin...' column header in the data table, with the text 'doble-click' next to it.

doble-click

DATA VARIABLE

Abdominals

Description

☐ Continuous

☐ Ordinal

☒ Nominal

☐ Nominal Text

Levels

15

18

19

20

21

☐ Retain unused levels

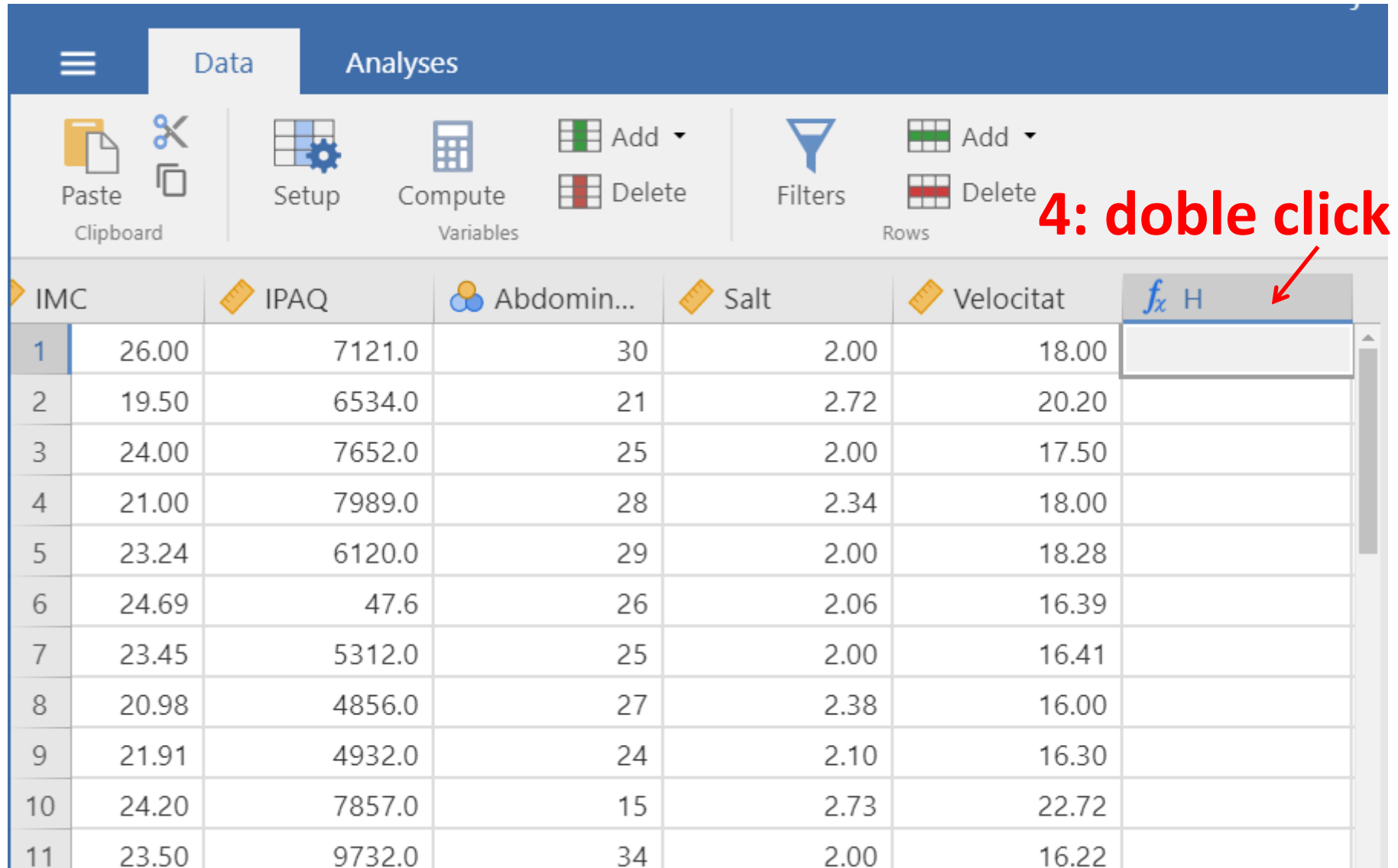
IPAQ	Abdomin...	Salt	Velocitat	Abdomin...	abd_zscore
7121.0	30	2.00	18.00	15	1.060

Creación de variables

The screenshot shows the Orange3 software interface. The 'Data' tab is selected, indicated by a red '1'. The 'Add' button in the 'Data Variable' section is highlighted with a red '2'. The 'Append' button in the 'Computed Variable' section is highlighted with a red '3'. The data table below shows the following data:

	Sexe	Edat	Age	Abdomin...	Salt
1	h	19	7121.0	30	
2	h	20	19.50	6534.0	21
3	h	19	24.00	7652.0	25
4	h	18	21.00	7989.0	28
5	h	25	23.24	6120.0	29
6	h	20	24.69	47.6	26
7	h	22	23.45	5312.0	25
8	h	22	20.98	4856.0	27
9	h	22	21.91	4932.0	24



Creación de variables



4: doble click

	IMC	IPAQ	Abdomin...	Salt	Velocitat	f_x H
1	26.00	7121.0	30	2.00	18.00	
2	19.50	6534.0	21	2.72	20.20	
3	24.00	7652.0	25	2.00	17.50	
4	21.00	7989.0	28	2.34	18.00	
5	23.24	6120.0	29	2.00	18.28	
6	24.69	47.6	26	2.06	16.39	
7	23.45	5312.0	25	2.00	16.41	
8	20.98	4856.0	27	2.38	16.00	
9	21.91	4932.0	24	2.10	16.30	
10	24.20	7857.0	15	2.73	22.72	
11	23.50	9732.0	34	2.00	16.22	

Creación de variables

 Add ▾
 Delete

Rows




COMPUTED VARIABLE

Abdominals_rec

Abdominals en 15 secs

Formula

f_x ▾ = Abdominals / 2

☐ Retain unused levels

5: click



Estandarización de variables

COMPUTED VARIABLE

abd_zscore

Abdominals standarizado

Formula

f_x

= (Abdominals - VMEAN(Abdominals)) /
VSTDEV(Abdominals)


Funciones existentes

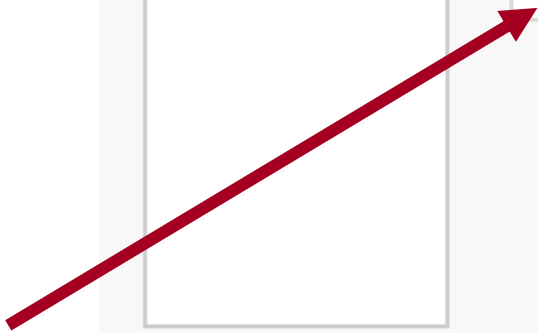
COMPUTED VARIABLE

abd_zscore

Abdominals standarizado

Formula

 = (Abdominals - VMEAN(Abdominals)) / VSTDEV(Abdominals)

click 

☐ Retain unused levels

Functions	Variables
Math	Sexe
ABS	Edat
EXP	IMC
LN	IPAQ
	Abdominals

ABS(number)

Returns the absolute value of a number.

Abdomin... abd_zs

15

Recodificación

☰

Data

Analyses

Paste

Clipboard

✂

Setup

Compute

Variables

Add

Delete

Filters

Add

Delete

Rows

COMPUTED VARIABLE

calorias_rec

Description

Formula

f_x

= IF(Calorias<1800, 1, IF(Calorias>=1800 and Calorias <2000, 2, IF(Calorias>=2000, 3)))

☐ Retain unused levels

	Grupo	IMC	Sexo	Calorias	f_x calorias_rec
1	A	24.4	Hombre	1890	2
2	A	23.3	Hombre	1345	1
3	B	19.4	Hombre	2345	3
4	A	19.1	Mujer	1678	1
5	B	18.3	Hombre	2100	3

Descriptives


Descriptives


Recodificación


≡


Data


Analyses


 Paste
Clipboard


 Setup


 Compute
Variables

 Add

 Delete

 Filters

 Add

 Delete

Rows

COMPUTED VARIABLE

calorias_rec






Description

Formula

f_x

= IF(Calorias<1800, 'bajo', IF(Calorias>=1800 and Calorias <2000, 'medio', IF(Calorias>=2000, 'alto'))))

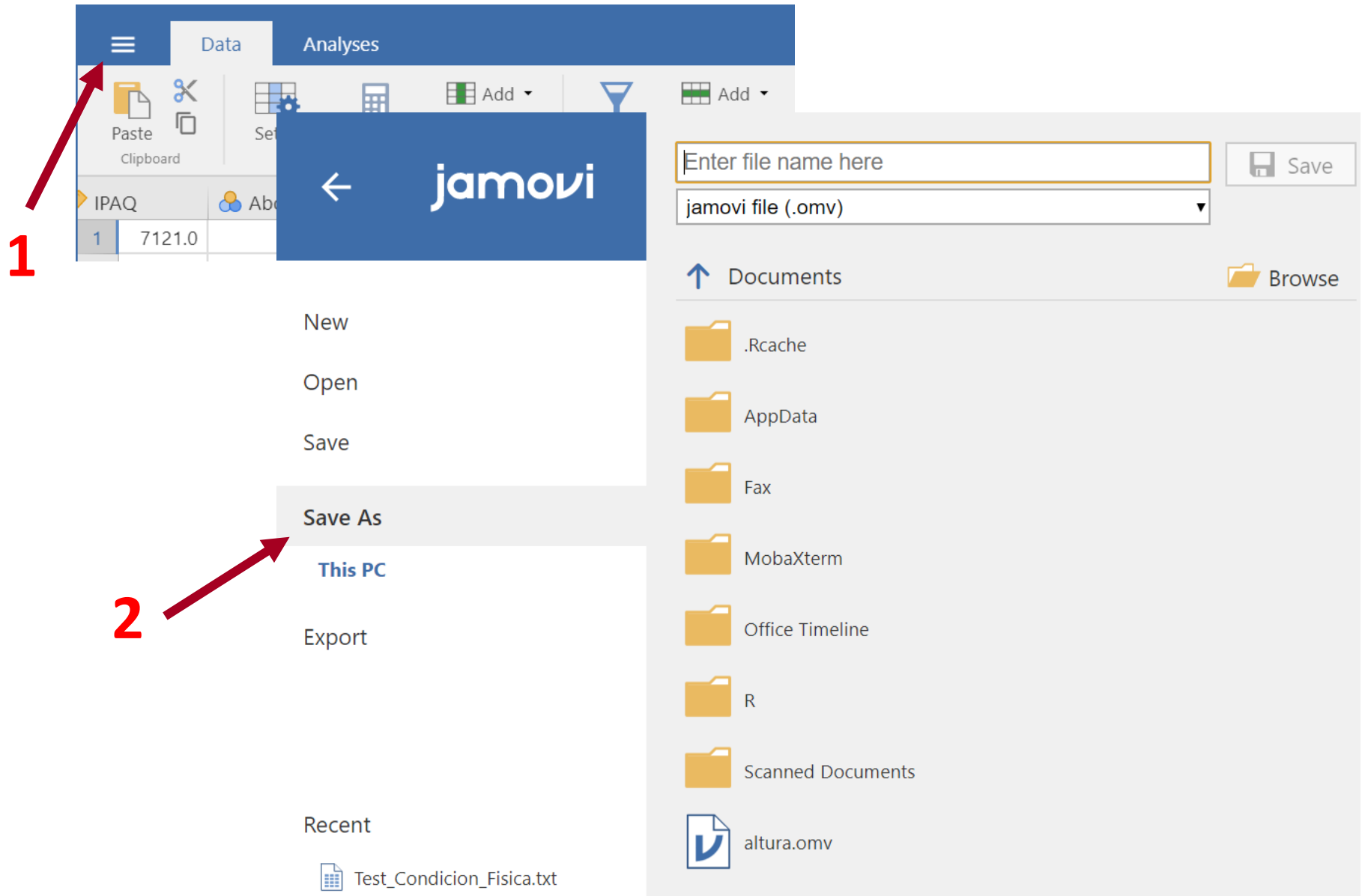
☐ Retain unused levels

	 Grupo	 IMC	 Sexo	 Calorias	 calorias_rec
1	A	24.4	Hombre	1890	medio
2	A	23.3	Hombre	1345	bajo
3	B	19.4	Hombre	2345	alto
4	A	19.1	Mujer	1678	bajo

Descriptives

Descriptives

Guardar datos de Jamovi



Análisis de subgrupos

☰

Data

Analyses

Paste

✂

Clipboard

Setup

⚙

Compute

🧮

Variables

Add

+

Delete

✖

Filters

🔍

Add

+

Delete

✖

Rows

ROW FILTERS

+

👁

Filter 1

active ☒

f_x

= IMC < 22

+

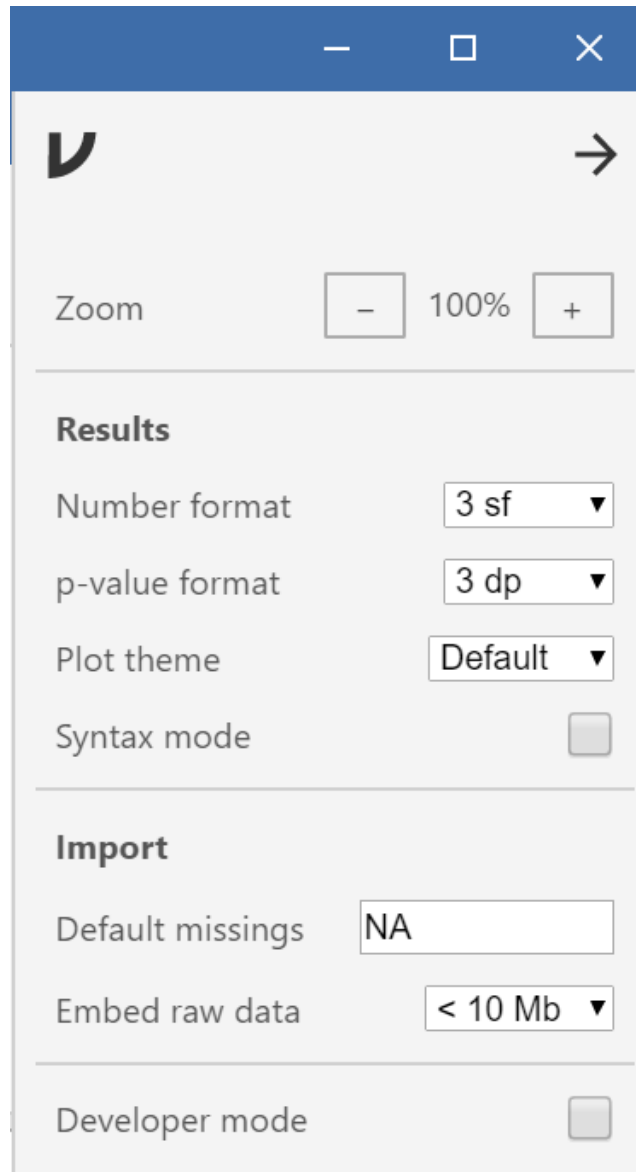
f_x

and Sexe = 'h'

✖

Description

Output settings



The screenshot shows a dialog box titled "Output settings" with a blue header bar containing standard window controls (minimize, maximize, close) and a blue arrow icon on the right. The main content area is light gray and divided into sections by horizontal lines. The "Zoom" section has a minus button, "100%", and a plus button. The "Results" section contains three dropdown menus: "Number format" set to "3 sf", "p-value format" set to "3 dp", and "Plot theme" set to "Default". There is also a "Syntax mode" checkbox which is unchecked. The "Import" section has a "Default missings" text input field containing "NA", an "Embed raw data" dropdown menu set to "< 10 Mb", and a "Developer mode" checkbox which is unchecked.

Zoom 100%

Results

Number format ▼

p-value format ▼

Plot theme ▼

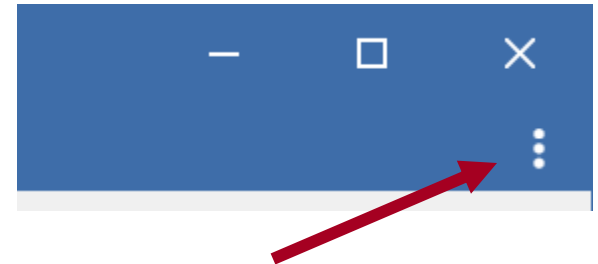
Syntax mode ☐

Import

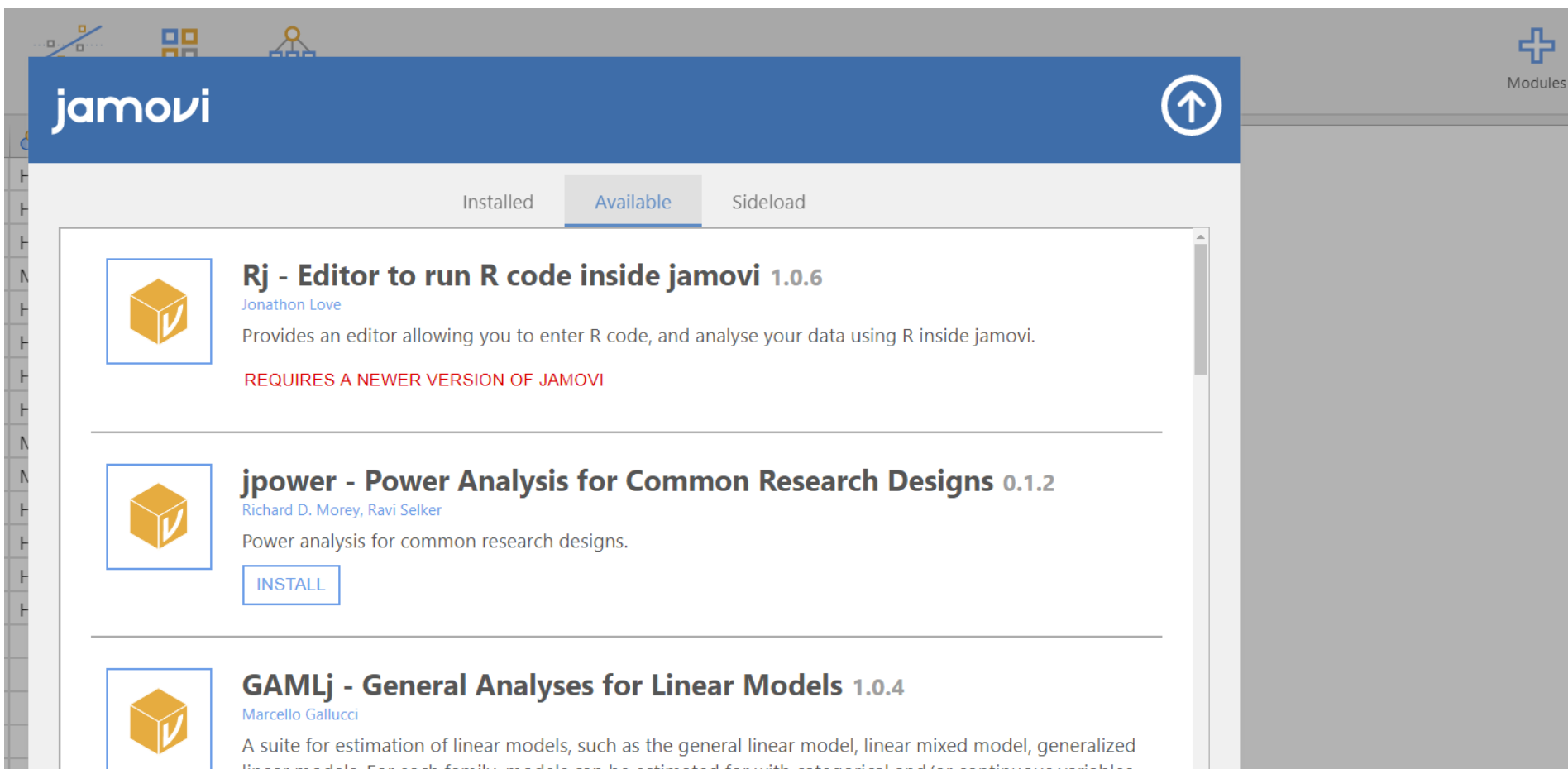
Default missings

Embed raw data ▼

Developer mode ☐



Módulos



The screenshot shows the Jamovi Modules window. At the top is a blue header with the 'jamovi' logo on the left and an upward arrow icon on the right. Below the header are three tabs: 'Installed', 'Available' (which is selected and highlighted with a blue underline), and 'Sideload'. The main content area lists three modules, each with a yellow cube icon containing a white checkmark. The first module is 'Rj - Editor to run R code inside jamovi 1.0.6' by Jonathon Love, with a description and a red warning that it requires a newer version of Jamovi. The second module is 'jpower - Power Analysis for Common Research Designs 0.1.2' by Richard D. Morey and Ravi Selker, with an 'INSTALL' button. The third module is 'GAMLj - General Analyses for Linear Models 1.0.4' by Marcello Gallucci, with a description of its capabilities.

jamovi

Installed Available Sideload

Rj - Editor to run R code inside jamovi 1.0.6
Jonathon Love
Provides an editor allowing you to enter R code, and analyse your data using R inside jamovi.
REQUIRES A NEWER VERSION OF JAMOVİ

jpower - Power Analysis for Common Research Designs 0.1.2
Richard D. Morey, Ravi Selker
Power analysis for common research designs.
INSTALL

GAMLj - General Analyses for Linear Models 1.0.4
Marcello Gallucci
A suite for estimation of linear models, such as the general linear model, linear mixed model, generalized linear models. For each family, models can be estimated for with categorical and/or continuous variables.

Modules