

RStudio lab assignment: correlation



[\[How to submit an assignment\]](#)

[\[Code templates in R\]](#)

[\[Interpretation templates\]](#)

[\[Variables in GSS\]](#)

Note: Do not run or interpret the analyses without opening [\[Variables in GSS\]](#) file, using "What it measures" columns, reading variable type, how the questions were asked, and the response sets.

The video below shows how to complete this assignment with different variables from start to finish. Watch the video and read the instructions together. You need to attend the lecture or watch the lecture video to understand this assignment.

[\[SAMPLE ASSIGNMENT VIDEO and GOOGLE DOC\]](#)

- 1) Create a correlation analysis table using **mntlhlth** and **wwwhr** variables (5 points) and interpret it using r-value and p-value (10 points).

Code (-5):	<i>correlation analysis table code here</i>
Table:	
Interpretation:	

- 2) Create a correlation analysis table using **rfamlook** and **childs** variables (5 points) and interpret it using r-value and p-value (10 points).

Code (-5):	<i>correlation analysis table code here</i>
Table:	
Interpretation:	

- 3) Create a correlation scatterplot graph using **mntlhlth** and **wwwhr** variables. **[graph: 5 points; xlab: 2.5 points; ylab: 2.5 points]**

Code (-5):	<i>correlation scatterplot graph code here</i>
Graph:	

- 4) Create a correlation scatterplot graph using **rfamlook** and **childs** variables. **[graph: 5 points; xlab: 2.5 points; ylab: 2.5 points]**

Code (-5):	<i>correlation scatterplot graph code here</i>
Graph:	

5) Create a correlation matrix table using **mntlhlth**, **wwwhr**, **rfamlook**, **childs**, and **hrsrelax** variables (10 points)

interpret the correlation between **childs** and **hrsrelax** variables (5 points).

interpret the correlation between **rfamlook** and **mntlhlth** variables (5 points).

Code (-5):	correlation matrix table code here
Table:	
Interpretation (childs and hrsrelax):	
Interpretation (rfamlook and mntlhlth):	

- 6) Create a scatterplot matrix using **mntlhlth**, **wwwhr**, **rfamlook**, **childs**, and **hrsrelax** variables (15 points)

Code (-5):	<i>correlation scatterplot matrix code here</i>
Graph:	

- 7) Create a correlogram using **mntlhlth**, **wwwhr**, **rfamlook**, **childs**, and **hrsrelax** variables (15 points)

Code (-5):	<i>correlogram code here</i>
Graph:	

- 8) Throughout this assignment, you generated many figures, which consumed a significant amount of RAM. When you are done with this assignment, you need to relaunch the project; otherwise, RStudio will crash in the coming weeks.

Follow the “What to do if RStudio Cloud crashes?” [flashcard instructions](#).

Highlight **YES** or **NO** (Otherwise -10)

The item below should be highlighted as 'YES.' If there is a 'NO,' do not submit this assignment. Instead, email me with your questions.

1	YES / NO	I followed the “What to do if RStudio Cloud crashes?” flashcard instructions, and I relaunched the project.
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