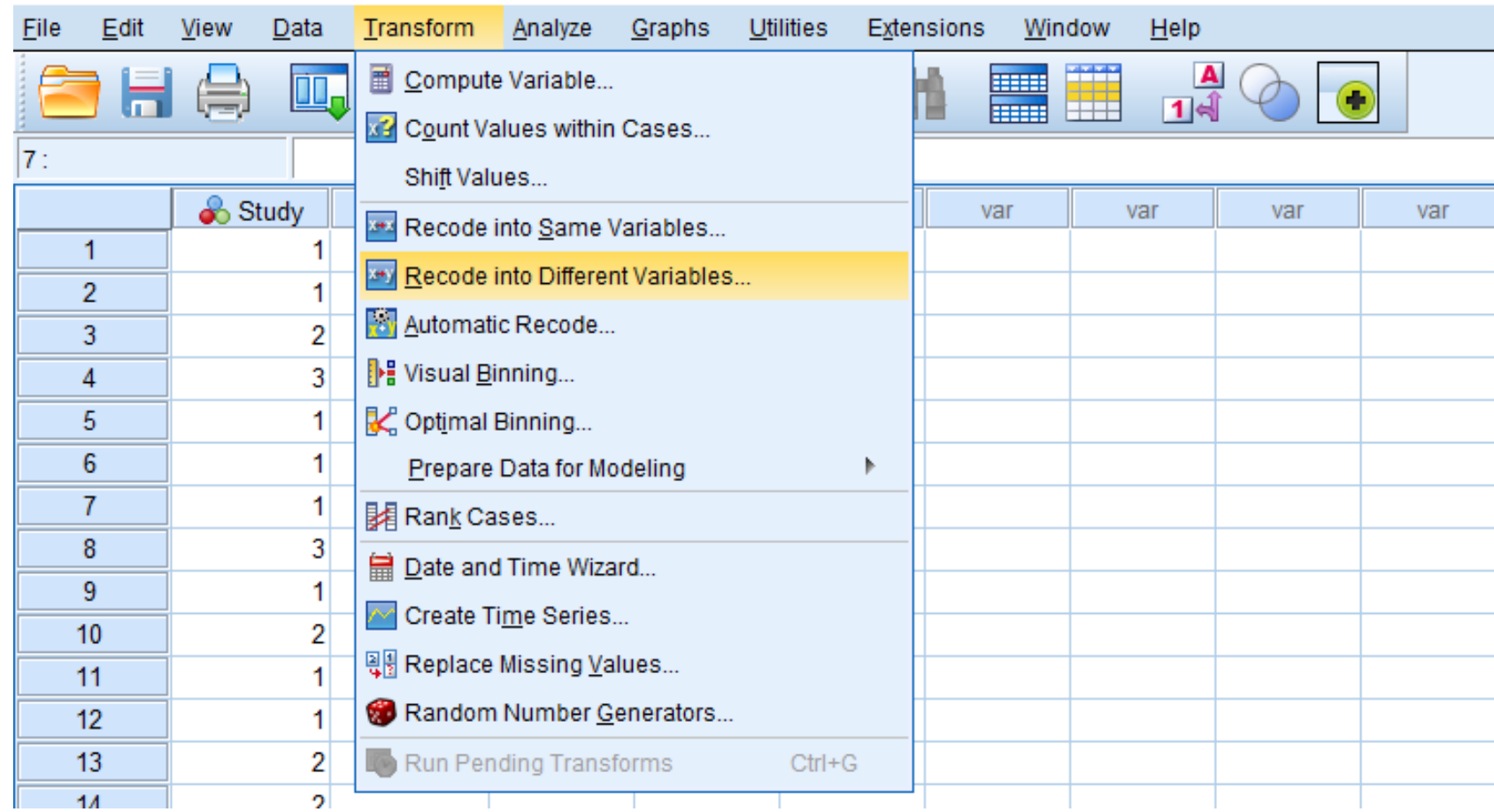


In this example we are going to convert one categorical variable (Study) with three categories (Economics = 1, Psychology = 2 and Pedagogy = 3) into two dummy variables. We will make a dummy variable for the category Psychology and for the category Pedagogy. Economics will serve as the reference group.

Step 1

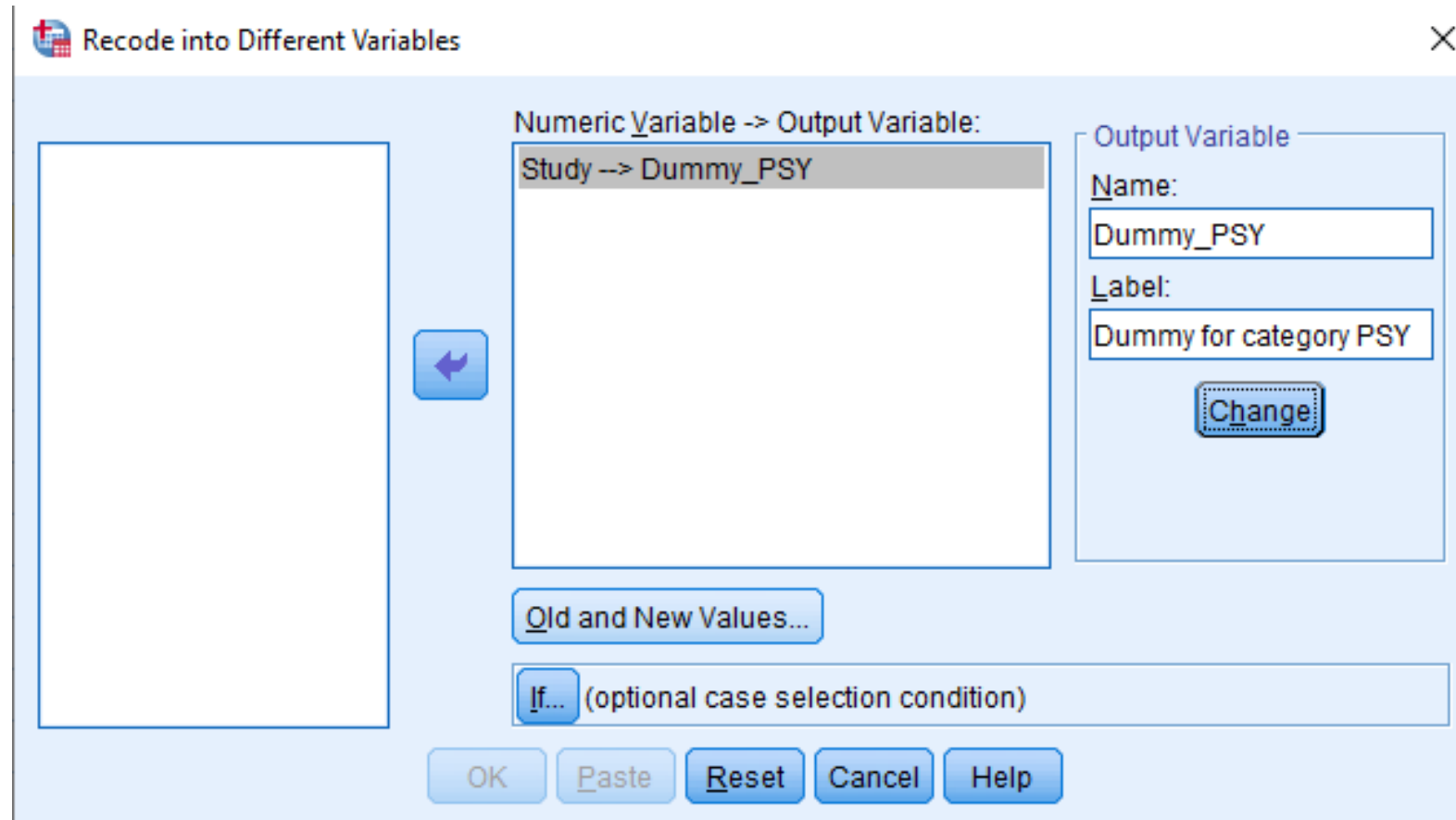
➤ Click on Transform > Recode into different variables

(Note that the option Recode into Same Variables can also be used here, but this option will overwrite the original variable)



Step 2

- Drag the relevant variable (in this example **Study**) to the 'Numeric Variable > Output variable' box;
- Under 'Output Variable' you can give the new variable a name and label, and then click on 'Change';
- Then click on the button 'Old and New Values';



In this example we start with making a dummy variable for the category Psychology. This means we have to make sure that the category Psychology will be coded with the value '1', and the other two groups both receive the value '0'. (Remember that in this dataset, Psychology was originally coded with the value '2'.)

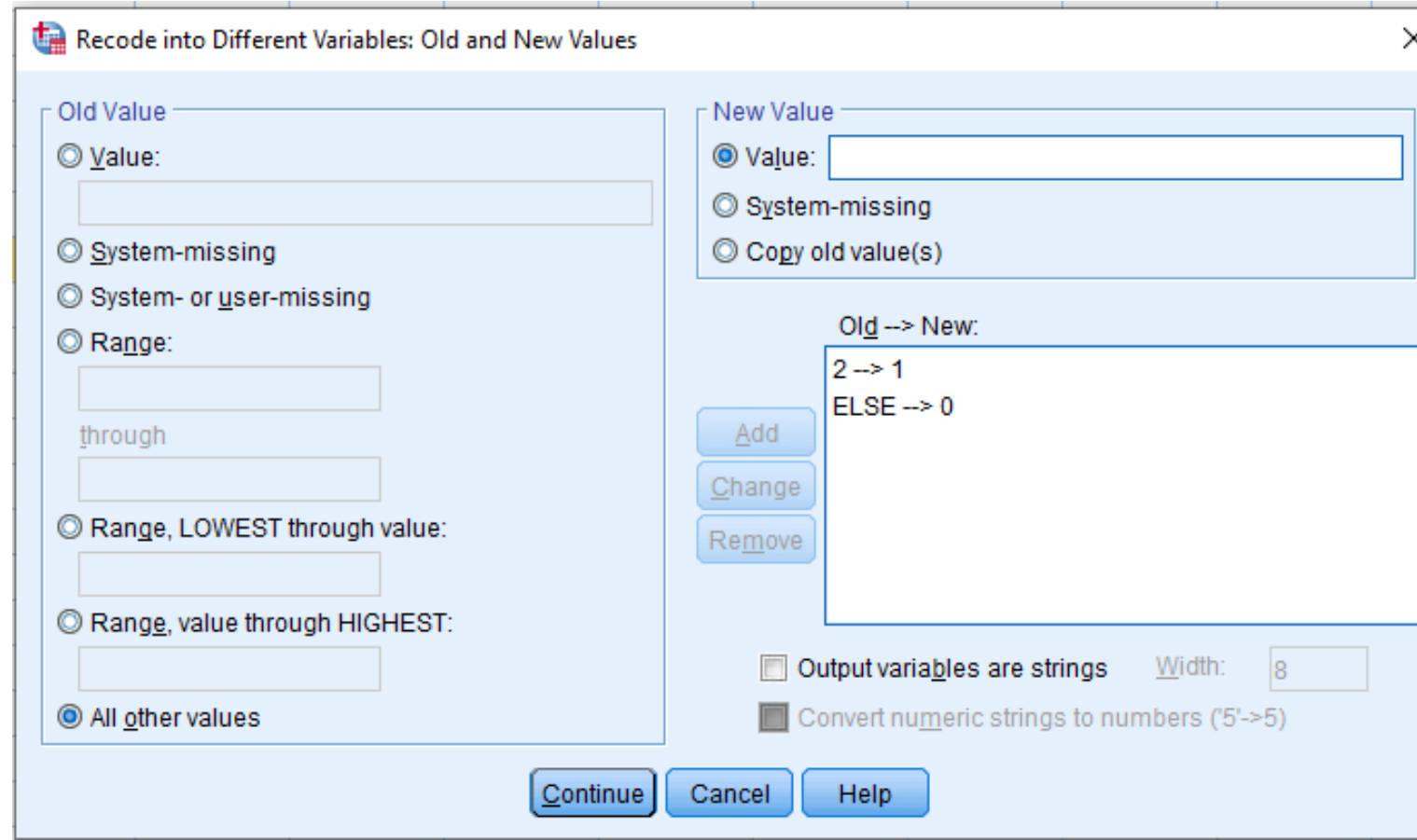
Step 3

➤ On the left side of the screen, under 'Old Value' click on Value, and enter the value '2' (this is the category for Psychology) in the box. On the right side of the screen, under 'New Value' click on Value, and enter the value '1' in the box. Then click on 'Add'.

Step 4

➤ Then, on the left side of the screen, under 'Old Value' click on All other values.

On the right side of the screen, under 'New Value' click on Value, and enter the value '0' in the box. Then click on 'Add'.

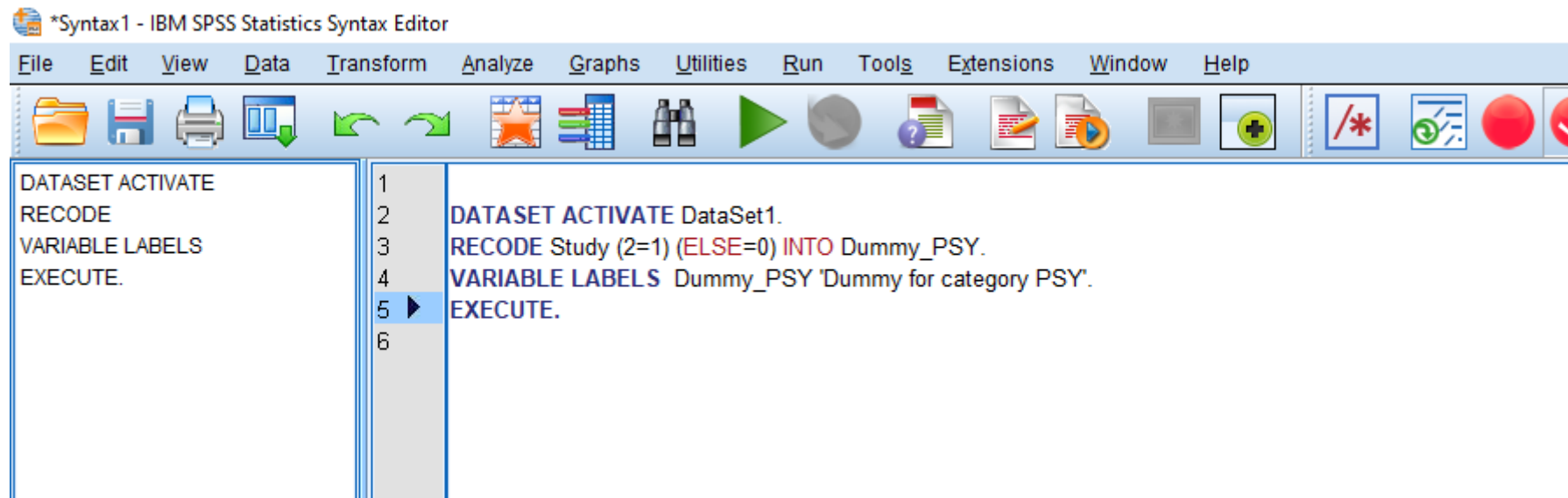


The image shows the 'Recode into Different Variables: Old and New Values' dialog box in SPSS. The 'Old Value' section on the left has the 'Value' radio button selected with an empty text box below it. The 'New Value' section on the right has the 'Value' radio button selected with an empty text box below it. In the 'Old --> New:' list, the entry '2 --> 1' is present, and 'ELSE --> 0' is also visible. At the bottom right, there are checkboxes for 'Output variables are strings' (unchecked) and 'Convert numeric strings to numbers ('5'-->5)' (checked). The 'Width' is set to 8. At the bottom are 'Continue', 'Cancel', and 'Help' buttons.

Old Value	New Value
2	1
ELSE	0

Step 5

➤ Click on 'Continue' and then 'Paste' and 'run' the syntax. The syntax code should look like this:



We have now created the first dummy variable, for the category Psychology!

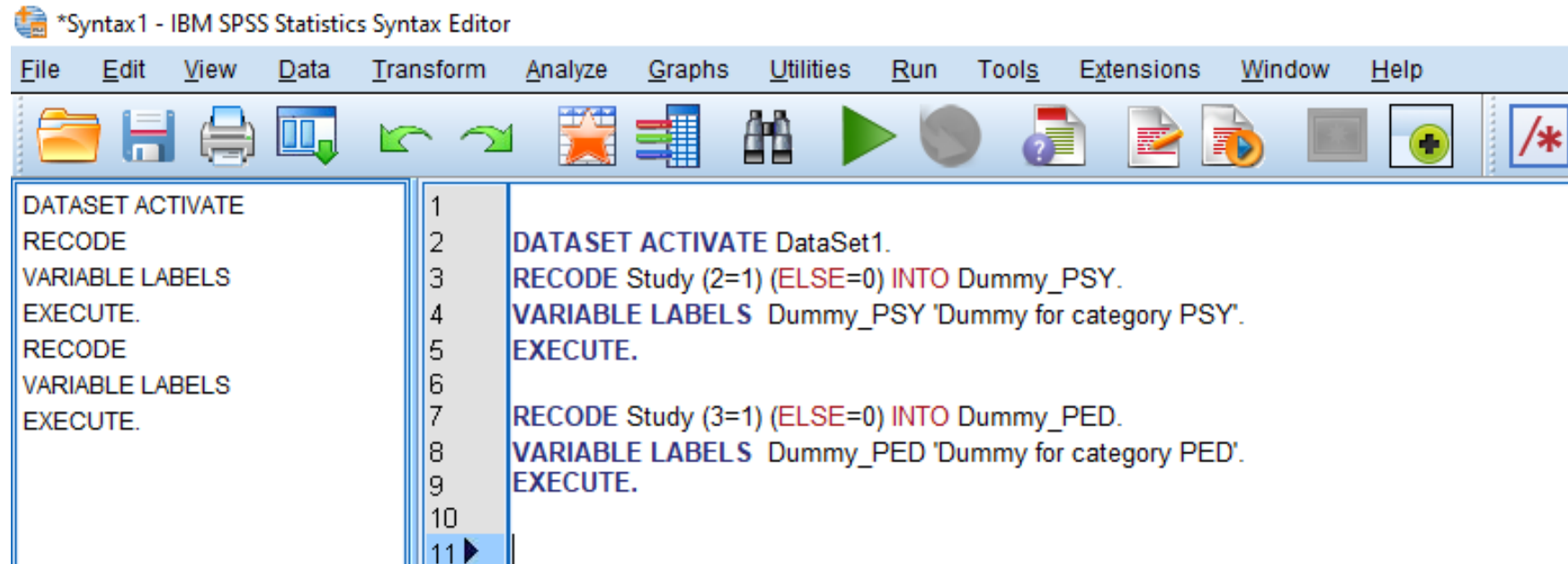
Step 6

In order to create the second dummy variable (this time for Pedagogy), you can:

- EITHER follow steps 1 to 5 again, but now name the new variable Dummy_Ped (under step 2), and under step 3, make sure to recode value '3' into value '1'. (Because Pedagogy was originally coded with the value '3'.)
- OR copy the syntax code in the syntax screen, and change the value 2 into the value 3 in the syntax code, and change the name Dummy_PSY into Dummy_Ped, and change the corresponding label. Then 'run' the syntax.

Step 6

➤ The syntax code should now look like this:



The screenshot shows the IBM SPSS Statistics Syntax Editor window. The title bar reads '*Syntax1 - IBM SPSS Statistics Syntax Editor'. The menu bar includes File, Edit, View, Data, Transform, Analyze, Graphs, Utilities, Run, Tools, Extensions, Window, and Help. The toolbar contains icons for file operations (folder, save, print, view), navigation (back, forward), analysis (star, bar chart, binoculars), execution (play button, stop button), and other utilities (help, new, open, save, delete, add, and a red asterisk in a box). The main text area displays the following syntax code:

```
1 DATASET ACTIVATE DataSet1.  
2  
3 RECODE Study (2=1) (ELSE=0) INTO Dummy_PSY.  
4 VARIABLE LABELS Dummy_PSY 'Dummy for category PSY'.  
5 EXECUTE.  
6  
7 RECODE Study (3=1) (ELSE=0) INTO Dummy_PED.  
8 VARIABLE LABELS Dummy_PED 'Dummy for category PED'.  
9 EXECUTE.  
10  
11
```

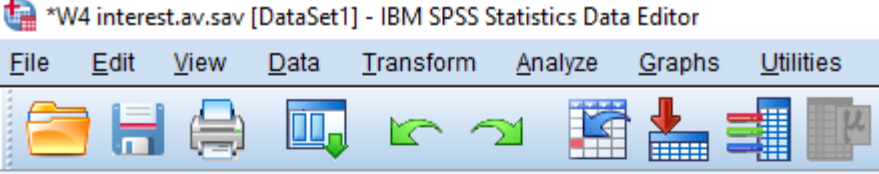
We have now created both dummy variables, one for the category Psychology and one for the category Pedagogy!

In the data file we can now see the two new dummy variables.

-We can see that all the values '2' (=category Psychology) on the variable *Study* are now converted to the value '1' in the new dummy variable for Psychology. And the other two categories have the value '0' on this dummy variable.

-All the values '3' (=category Pedagogy) on the variable *Study* are now converted to the value '1' in the new dummy variable for Pedagogy. And the other two categories have the value '0' on this dummy variable.

This way, all categories are represented only in the values '0' and '1', which is necessary to be able to perform a regression analysis when the predictor is categorical.



	Study	Dummy_PSY	Dummy_PED	var
1	1	0	0	
2	1	0	0	
3	2	1	0	
4	3	0	1	
5	1	0	0	
6	1	0	0	
7	1	0	0	
8	3	0	1	
9	1	0	0	
10	2	1	0	
11	1	0	0	
12	1	0	0	
13	2	1	0	
14	2	1	0	
15	1	0	0	
16	1	0	0	
17	3	0	1	
18	2	1	0	
19	2	1	0	
20	1	0	0	
21	3	0	1	
22	2	1	0	
23	1	0	0	