

## **One Sample Chi-Square**

### **(Chi-Square Goodness of Fit)**

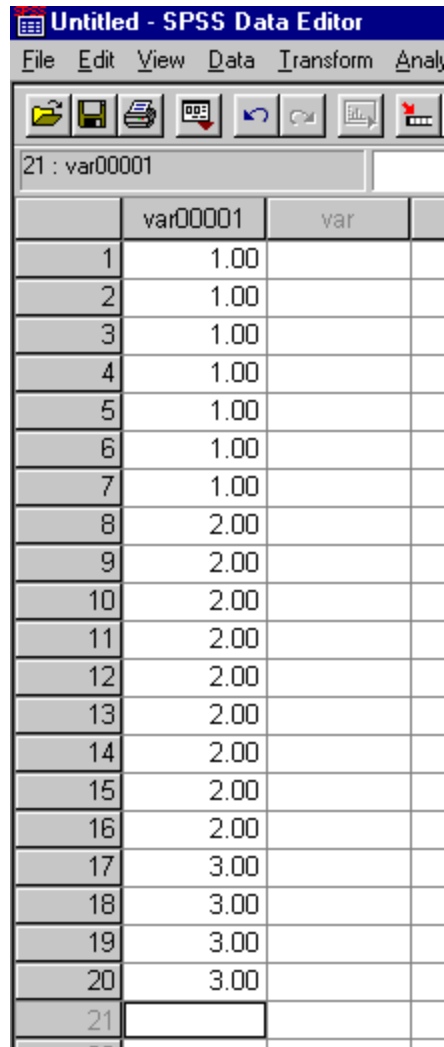
The following illustrates the proper data entry for completing a one-sample chi-square test using the following results:

Blonde	Brown	Black
7	9	4

The numbers represent the number of subjects who were identified with the corresponding hair color. Therefore, this study included 20 subjects (7 were blonde, 9 had brown hair, and 4 had black hair).

Before entering the data, each category should be assigned a number (e.g., blonde = 1, brown = 2, black = 3). The data entry for the one-sample chi-square test will only require the use of one column. The number of rows necessary for the analysis will correspond to the number of subjects (This study will require 20 rows since there were 20 subjects). Since the researcher identified 7 subjects with blonde hair, seven 1's must be entered into the column. The researcher would continue by entering nine 2's and four 3's. The following illustration shows the proper data entry for this study.

## One sample chi square

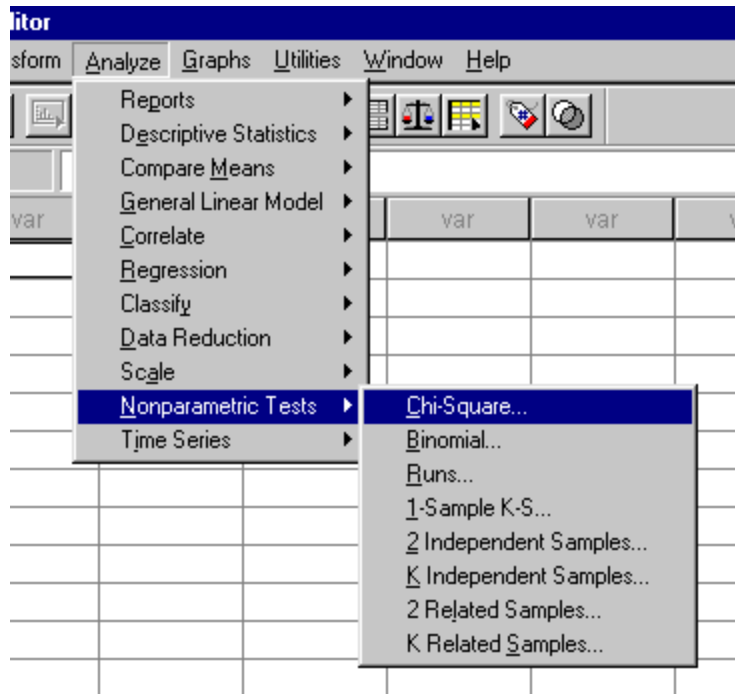


21 : var00001

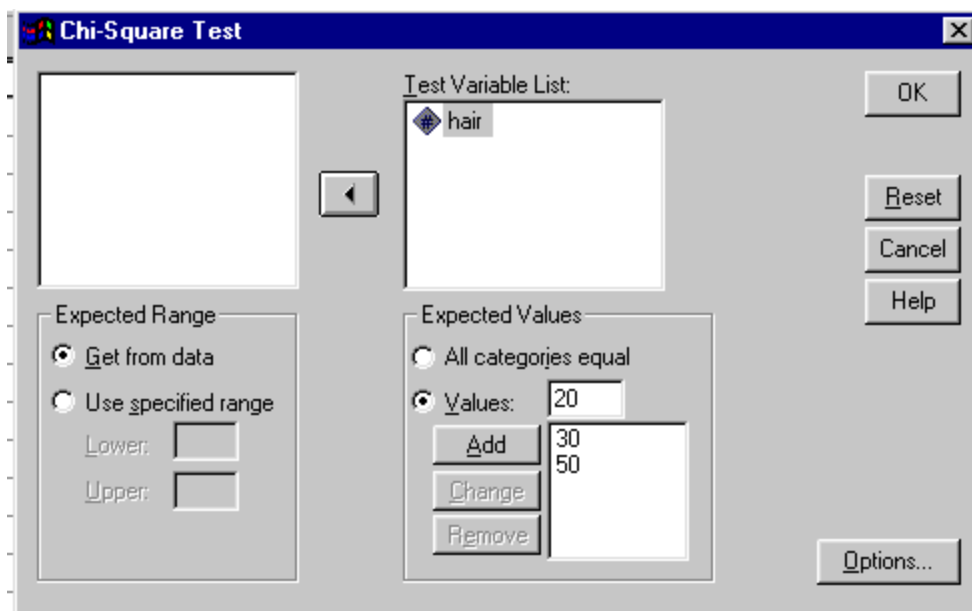
	var00001	var	
1	1.00		
2	1.00		
3	1.00		
4	1.00		
5	1.00		
6	1.00		
7	1.00		
8	2.00		
9	2.00		
10	2.00		
11	2.00		
12	2.00		
13	2.00		
14	2.00		
15	2.00		
16	2.00		
17	3.00		
18	3.00		
19	3.00		
20	3.00		
21			

After the data has been entered, you should select Analyze --> Nonparametric Tests --> Chi Square

## One sample chi square



After selecting Chi Square from the menu, you should specify the variable that is to be tested. If you are assuming that the groups will or should have equal percentages (see practice exercise 27) then you should select the default option under Expected Values which is All categories equal. However, if you are comparing the observed percentages to predetermined criteria (see practice exercise 28), you should select the Values option. The expected percentages must be entered in order starting with group 1. To enter the percentages, enter the value for Group 1 in the box next to values and then select Add. Continue in this manner until you have entered the percentages for all of the groups or categories (You should have the same number of percentages as categories).



## One sample chi square

After you have completed entering the expected values or chosen the All categories equal option, select OK to conduct the analysis.