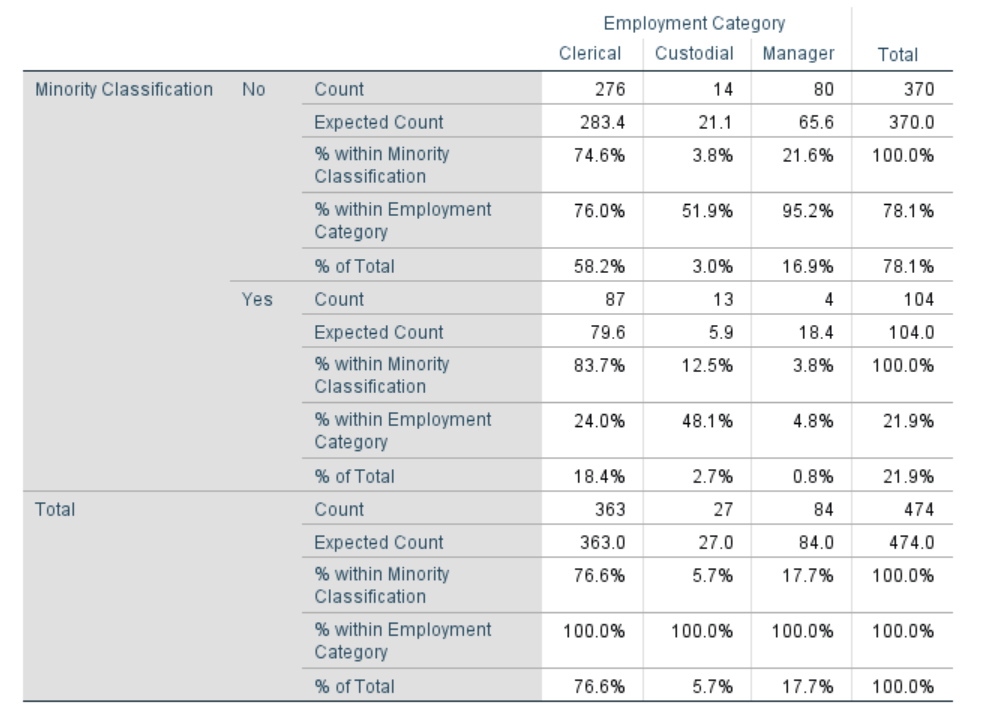
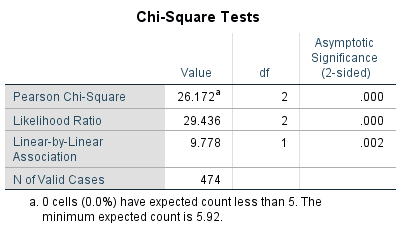
**Exercise 7**

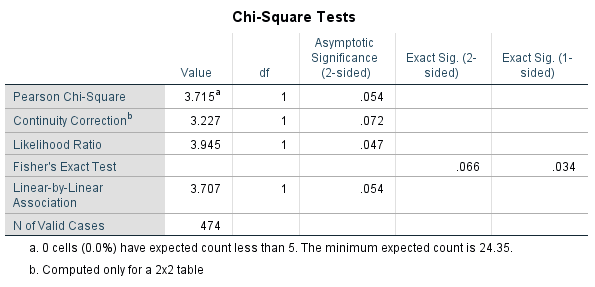
1. To produce a contingency table go to **Analyze -> Descriptive Statistics -> Crosstabs** and place one variable (minority status) in the Row box; and the other (employment category) in the Column box. In the **Cells** option select the options to display the observed and expected counts, and percentages for the row, column and total.

Results suggest a higher proportion of non-minority employees were managers (80) than expected (65.6); while a considerable lower proportion of minority employees were in managerial roles (4) than expected (18.4). This shows that while 21.6% of non-minority employees were managers; this was true for only 3.8% of minority employees.

2. To run a Chi-Square, follow the same steps as above, but select the **Statistics** option in the Crosstabs dialogue box, and select Chi Square.

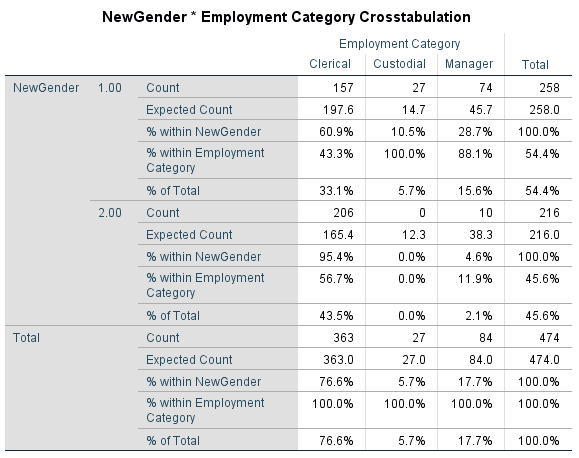
A Chi Square test revealed that there was a significant relationship between minority and employee status 2(2, *N* = 474) = 26.17, *p* < .001

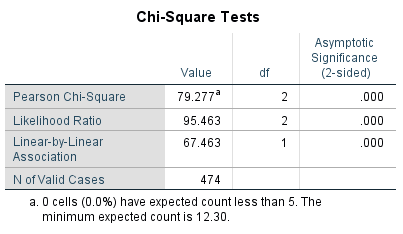
3/4. After collapsing Custodial and Managerial categories together using the **Recode** function, the Chi Square output becomes:



As p is now more than .05 (p=.054 is technically larger than p=.05), you could argue that the two variables are not related.

5/6. You would carry out a similar analysis to above, replacing the minority variable with gender.





Results show a disproportionately high proportion of male are managers (28.7%) compared to females (4.6%), and a much higher number of male managers than expected.

A Chi Square test revealed that there was a significant relationship between minority and employee status 2(2, *N* = 474) = 79.28, *p* < .001