

# [Free essay on quantitative research methods spss assignment one - univariate anal...](https://assignbuster.com/free-essay-on-quantitative-research-methods-spss-assignment-one-univariate-analysis/)

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## Problem #1

Describe each of the following variables and determine its level of measurement.   
Hapmar, HAPCOHAB, happy, marhappy, age, hrs1, educ, realrinc.   
Solution   
Problem #2   
Run the frequency tables and bar graphs for the following variables; hapmar, HAPCOHAB, happy, and marhappy. Based on the frequencies, describe how the adult United States population feels about being happy in contemporary American society? Support your findings based on the frequency tables.

## Solution

And also let’s construct bar charts with percentage:   
According to these frequency tables and bar charts we can make the following conclusions:   
- 65. 7% of the adult U. S. respondents think that their happiness of marriage is very high, they feel very happy being married. 31. 4% are very happy and 2. 9 % think that they are not happy   
- The happiness of relt with partner have the following distribution: 61. 3% think that this make them very happy, 36. 9% - pretty happy, 1. 8% - not too happy   
- The level of general happiness of the adult U. S. respondents is the following: 30. 2% are very happy, 55. 7% are pretty happy, 14. 1% are not too happy   
- 8. 2% strongly agree that married people are happier than unmarried, 28. 6% - agree, 31. 5% - neither agree, nor disagree, 26. 9% - disagree, 4. 8% - strongly disagree

## Problem #3

Run descriptive statistics for age, hrs1, educ, and realrinc. Get the minimum, maximum, mean, standard deviation, standard error of the mean, and skewness for each variable. Describe each variable using the uni-variate statistics.   
Solution

## Problem #4

Which variable in Question 3 exhibits the most normal distribution? Support your answer.   
Solution

## Problem #5

Which variable in Question 3 exhibits the most dispersed distribution? Support your answer.   
Solution   
The standard error is a powerful measure of dispersion. We can see, that the highest standard error is for the same variable – hrs1. Hence, this distribution is also the most dispersed.

## Problem #6

For hrs1 and realrinc, calculate the confidence interval with a 95 % level of confidence. Interpret the confidence interval for both variables.   
Solution   
Run Analyze -> Descriptive statistics -> Explore. Press the “ Statistics” button and check if the confidence interval option is enabled and the level of confidence is 95%. The output will be like following:   
According to the table above, we can make a conclusion, that at 95% level of significance the population mean value of Number of Hours Worked Last Week is between 39. 67 and 41. 53 hours, and the population mean value of Family Income in Constant $ is between $38, 195. 06 and $43, 302. 48

## Sources

Cohen, Bernard P., Developing Sociological Knowledge: Theory and Method, Latest Edition. Nelson Hall   
Leon Guerrero, Anna and Chava Frankfort Nachmias, Essentials of Social Statistics for a Diverse Society.