**Describe the distribution of Region, Ladder and Support**

1. Describe the distribution of Region.

Stata: numlabel, add

tab Region

graph hbar (count), over(Region) blabel(bar)

(Note that “*numlabel*, *add*” and “tab Region” are two separate commands and should be typed in two separate lines. The “*numlabel*” command allows you to attach numeric codes to value labels, and the “*tab*” command instructs Stata to tabulate the frequency of a variable. Also note that a space is needed between *hbar* and (*count*) in the third line.)

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| --- | --- | --- | --- |
| (a) | Paste the bar chart below: | | |
|  |  | | |
| (b) | Level of measurement: | Ordinal |  |
|  |  |  |  |
| (c) | Describe the distribution of Region: | | |
|  |  | | |
|  | This is asymmetrical distributed to the left and not normally distributed. | | |

1. Describe the distribution of Ladder and Support in terms of their central tendency, dispersion, skewness, and the presence of outliers.

Stata: Sum Ladder Support, detail

hist Ladder, freq

hist Support, freq

|  |  |  |
| --- | --- | --- |
| (a) | Histograms for Ladder and Support (paste the diagramsinside the boxes below) | |
|  | Histogram for Ladder | Histogram for Support |
|  | | |
| (b) | Describe the distribution of Ladder: | |
|  | Mean = 5.418, Median = 5.326, variance = 1.214, Skewness= 0.308 and there is no presence of outliers. | |
| (c) | Describe the distribution of Support: | |
|  | Mean = 0.804, Median = 0.827 variance = 0.015, Skewness= -1.245 there is a clear presence of outliers in the support variable. | |

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| 3. | (a) | | Why can’t we use the “sum” and “hist” commands forRegion? |
|  | | | They both cannot be used because region is a categorical data and they best work for continuous data |
|  | | (b) | Why can’t we use the “*tab*” and “*hbar*” commands for Ladder and Support? |
|  | | | The tab and hbar commands are mostly used to find percentages in categorical variable since ladder and support are continuous variables they cannot be used then. |