Data examination

Data Examination Data Examination The data selected include Variable " Gender" from the qualitative data while variable " Intrinsic" from the quantitative section. The data was selected on mere intuition and no specific criteria were utilized for the selection of variables for data analysis. The variables chosen seemed to be easy to analyze and hence therefore selected for analysis. The chosen data is listed below. Gender Intrinsic 1 5. 5 1 5. 2 1 5. 3 1 4. 7 1 5. 2 1 4. 7 1 4. 7 1 5. 4 1 3. 7 1 5. 2 1 5. 5 1 5. 2 1 5. 3 1 4. 7 1 5. 5 1 5. 2 1 4. 7 1 5. 4 1 5. 5 1 4. 7 1 5. 2 1 5. 3 1 5. 3 1 5. 5 1 5. 2 1 5. 3 1 4. 7 1 5. 2 1 4. 7 1 4. 7 1 5. 4 1 3. 7 1 5. 2 1 5. 5 1 5. 2 1 5. 3 1 4. 7 1 5. 5 1 5. 2 1 4. 7 1 5. 4 1 5. 5 1 4. 7 1 5. 2 1 5. 3 1 5. 2 1 5. 3 1 5. 3 1 5. 2 1 5. 3 2 4. 7 2 5. 4 2 5. 5 2 5. 3 2 4. 7 2 5. 2 2 4. 7 2 4. 7 2 5. 4 2 3. 7 2 5. 2 2 5. 5 2 5. 2 2 5. 3 2 4. 7 2 5. 5 2 5. 2 2 4. 7 2 5. 4 2 5. 5 2 4. 7 2 5. 2 2 5. 3 2 5. 3 2 5. 5 2 5. 2 2 5. 3 2 4. 7 2 5. 2 2 4. 7 2 4. 7 2 5. 4 2 5. 5 2 5. 2 2 5. 3 2 4. 7 2 5. 5 2 5. 2 2 4. 7 2 5. 4 2 5. 5 2 4. 7 2 5. 5 2 5. 2 2 4. 7 2 5. 4 2 5. 5 2 4. 7 2 5. 2 2 4. 7 In the above data set, the gender has been identified by using numeric value such that " 1" shows male while " 2" shows female. Measure of Central Tendency and Measures of Variability In order to obtain the measures of central tendencies as well as the measures of variability, MS Excel data analysis ribbon has been utilized. Thus using descriptive statistics all the relevant information is collected and is listed below. Descriptive statistics Gender   Intrinsic   Mean 1. 5 Mean 5. 105 Standard Error 0. 050252 Standard Error 0. 038961 Median 1. 5 Median 5. 2 Mode 1 Mode 4. 7 Standard Deviation 0. 502519 Standard Deviation 0. 389606 Sample Variance 0. 252525 Sample Variance 0. 151793 Skewness -6. 9E-18 Skewness -1. 51183 Range 1 Range 1. 8 Minimum 1 Minimum 3. 7 Maximum 2 Maximum 5. 5 Count 100 Count 100 Confidence Level (95. 0%) 0. 099711

Confidence Level (95. 0%) 0. 077306 In case of gender the values obtained through descriptive statistics function are mostly invalid as gender can either be male or female; therefore the values of mean and median seem invalid as it neither depicts a male person nor female. While the value of mode shows that the proportion of male individuals utilized in the survey is greater than that of females however in actual, the ratio is same. Similarly being a qualitative data the values of measures of variability i. e. Standard Deviation and Variance are both invalid too. While all the measures show valid results in case of intrinsic variable. The measures of central tendency i. e. mean, median and mode show valid values of 5. 105, 5. 2 and 4. 7 respectively. The measures of variability are also valid in case of Variable " Intrinsic". The standard deviation is found to be equal to 0. 389606 while the variance is found to be equal to 0. 151793. The measures of variability reveals that the mean value of the given data set fairly represents the data and each data points deviates from the mean value by quite lesser figures. Visual representation of Data In case of qualitative data such as Gender, Pie Chart is utilized to exhibit the proportion of male and female individuals. The pie chart shows that the number of male and female respondents was equal in the given sample. In order to see the distribution of sample observations for the variable " Intrinsic" the data has been transformed into tabulated data of 7 classes. Each of 0. 2 sizes. It is evident from the frequency distribution that most of the data points lay within the class 4. 8 to 5. 0 while three classes are empty. Class intervals Frequency 3. 6 to 3. 8 3 3. 9 to 4. 1 0 4. 2 to 4. 4 0 4. 5 to 4. 7 28 4. 8 to 5 0 5. 1 to 5. 3 41 5. 4 to 5. 6 28   100 Using the data provided in the above table, a frequency histogram has been genrated. The above histogram shows unimodal data where the maximum data points

listed in the calss interval of 5. 1 to 5. 3 while two classes of equal number of respondents and three classes having zero data point. The histogram also depicts that the data is positively skewed. The visual representation helps in the understanding of data in an easy and understandable manner without knowing the actual values of the measures of central tendency or the measures of variability (Triola, 2009). References Triola, M. F. (2009). Essentials of Statistics. Addison-Wesley.