Coursework – Public Transports Satisfaction

Analysis of the data provided in the SPSS for Windows system file **'Cousework_Public Transports.SAV'** with SPSS for Windows software. Write a small report with the most important results and main conclusions of the data analysis. The database consists of 835 observations on several variables collected from a survey of present and past users of Public Transports (PT) resident in the Metropolitan Area of Lisbon, aged 15 or more years. Three classes of information were collected:

- The first class concerns the use of PTs: type of transport, frequency and reasons to use.
- The second part concerns the level of satisfaction with five different aspects of the services provided: "Quality of service (frequency, punctuality, reliability)", "Comfort and safety (cleanness, noise, availability of seats, security)", "Price (single ticket, monthly signature, alternative transports), "Professionals behavior (skills, sympathy, attitude, appearance)" and "Complains (capacity to answer complains and to solve problems)". For these 5 items a continuous scale between 0 and 10 was used, where 0 = Completely unsatisfied, and 10 = Completely satisfied.
- The last part includes personal information on interviewees: municipality of residence, gender, age group, education, profession, number of members and net monthly income of the household.

Suppose you are the Market Research analyst and you have to prepare a report and present the survey results. Prepare a short document (with a maximum of 7 pages) that synthesises this information to deliver by October 20th. Do not forget to interpret all tables, graphics and measures included in the document.

Some suggestions that might help you writing the report: divide your report into sections (Introduction, Sample characteristics, Profile of use of PT, Satisfaction with services, Conclusions, Bibliography; Do not forget to include an Index; Bibliographic references used to do the coursework should be included at the end; Include in your report only those SPSS outputs you find important to describe the data and support your analysis.

Your report should include:

a) Sample characterization: define the type of variables being analysed and choose the most appropriate type of graphs, tables and descriptive measures to characterize the sample, in terms of municipality of residence, gender, age group and number of members of the household.

b) Use of public transports: draw the adequate graphic and table presentations to describe the profile of PT use.

c) Graph the mean profile of the 5 items related to the level of satisfaction.

d) Determine the mean, median, mode of variable "Quality of service" and interpret the results.

e) Determine the variance and standard deviation of variable "Number of members of the household" and interpret the results.

f) Determine the quartiles of variable "Comfort and safety" and interpret the results.

g) Determine the 90th percentile of variable "Professionals behaviour" and interpret the result.

h) Draw boxplots for the variable "Price" by the frequency of use of PT and interpret the results.

i) How can the distribution of variable "Complains" be characterized in terms of skewness and kurtosis? Use statistical measures and graphs to answer this question.

ISCTE ⬤ Business School

Instituto Universitário de Lisboa

BRU – Research Methods Group

PUBLIC TRANSPORT SATISFACTION SURVEY

1. Municipality of residence? _____

2. Gender: F ☐ M ☐   **3. Age group**: 15-24 ☐   25-34 ☐   35-44 ☐   45-64 ☐   65 or more ☐

I – Use of Public Transports

1. Which transports do you use?

Bus ☐   Train ☐   Boat ☐   Subway ☐   Car ☐   Other ☐   Which one? _____

2. How often do you use public transports?

Every day ☐   5 days per week ☐   3-4 days per week ☐   1-2 days per week ☐   1-3 days per month ☐   Other ☐

3. Why do you use public transports?

Commute regularly to work and back home ☐   School ☐

Personal affairs ☐   Shopping ☐

Work and business (non regular) ☐   Social and Leisure ☐

IV – SATISFACTION WITH PUBLIC TRANSPORT SERVICES

Please, state your satisfaction level regarding the following aspects of the public transport you used more frequently, using a continuous scale from 0 = completely unsatisfied to 10 = completely satisfied.

	0	1	2	3	4	5	6	7	8	9	10
1) Quality of service											
2) Comfort and safety											
3) Price											
4) Professionals											
5) Complains											

V – RESPONDENT CHARACTERISTICS

1. Education:

Up to 4 years ☐   5-8 years ☐   9-10 years ☐   11-12 years ☐

Professional ☐   Bachelor/Master/Ph.D ☐   DNK/DNA ☐

2. Professional situation:

Self-employed ☐   Worker / employee ☐   Public service worker ☐

Housewife ☐   Student ☐   Retired ☐   Unemployed ☐

3. Number of members of your household (including you)? _____

4. Net monthly income of your household (€):

800€ or less ☐   801 € to 1200€ ☐   1201 € to 1600€ ☐   1601 € to 2000€ ☐   2001 € to 2400€ ☐   2401€ or more ☐ DNK/DNA ☐