

# **Guidelines and basic instructions**

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# **Boom**

These guidelines can be used to supplement the book *A guide to practice-based (social) legal research*, The Hague: Eleven, ISBN 978-94-6236-214-7.

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In this article, you will find guidelines you can use to help you write your research proposal and research paper. Since the book *A guide to practice-based (social) legal research 10 steps to graduation* provides the basics, reference is made to chapters from it.

You will also find basic instructions for setting up a dataset in SPSS and analyzing the data.

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## **Guidelines research (design)proposal**

1. Introduction
2. Theoretical framework
3. Research design and implementation (Methodological overview and accountability)
4. Planning and budget (costs)

### **1. Introduction**

1.1 Introduction of the topic/subject/problem (What is the subject/problem? What is the cause? Use literature review)

1.2 Problem description: Define statement of problem/issue. What is the problem? Analyze this problem; “Why is it a problem? Why does this research need to be conducted?”

1.4 Objective (what is the goal of the research?)

1.5. Research question (main question and sub questions)

1.6. Research methods and accountability (research justification)

1.7 Reader’s guide

### **2. Theoretical framework (Review of the literature)**

The theoretical framework provides the background and context for the research problem. *“It should establish the need for the research and indicate that the writer is knowledgeable about the area”* (Wiersma, 1995, p. 406).

What is the theoretical framework? The theoretical framework is the preliminary research that forms the scientific basis for the graduation topic you are researching. It is a framework within which all of the information collected on relevant theories, visions, ideas and models of the graduation subject comes together in one place. After all, your research must be justified by theories and literature. This justification takes place in the theoretical framework. During the research process, you have already gathered some information that originates from literature, legal sources and other information sources. In the theoretical framework, you will further explore this information by analyzing and defining the key concepts that indicate the topics in the main question. You will also have to deepen the information collected earlier by looking for information on theories, visions, ideas and models from the literature that are relevant to your main question. Then you put the information you have into a coherent whole. You do this by relating the information with the main question. You will therefore constantly have to look back at

the main question, after which you will ask yourself how this information relates to your main question. This information is important for your research and you should describe the information. As indicated before, looking up information and studying and analyzing information is a recurring action in the research process. This means that you look back at the information found in the preliminary research in step 3 (Chapter 3). Now you start looking for information again, but for step 6 you go into depth by exploring key concepts and seeking the theoretical depth about your thesis topic. For this, you can study and analyze various visions and perspectives of authors from the literature. You will also deepen your knowledge of the legal, political, organizational and socio-social contextual background of step 3 by looking at the connection with your main question. In addition, you will have investigated whether any research has already been carried out. If previous research is involved, you analyze the results and relate them to the main question. For the theoretical framework, you frame and further deepen the previously found information from step 3 (Chapter 3) that underlies the main question. By elaborating on the information you collected earlier (in step 3), you show that you have knowledge of the thesis topic you are researching, and through the theoretical foundation you show that you justify your research. This is the essential difference between drawing up a context of the (social) legal thesis topic from Chapter 3 and drawing up a theoretical framework that we will discuss in this chapter. When outlining a context, it is important that you give sufficient background information about your thesis topic, so that the main question can be understood. A theoretical framework is about demonstrating knowledge and justifying your research by means of a literature study (See Chapter 7).

### **3. Research design and implementation (Methodological overview and accountability)**

In this chapter the methodological steps are described and justified. You will describe the preparation for conducting your research in your research proposal in the chapter that covers the research design. For each sub-question you describe the way you plan to collect your data. If you use written documents, you indicate which sources are involved (by name), in the case of methods involving people (survey, interview, observation) you describe how many and which people you are going to subject to your research and what the approach will be with regard to the method in question.

#### 3.1 Research questions (main question and sub questions)

#### 3.2 Operationalization

- Define the concepts that are stated in the main question
- Identify the constructs that are necessary to include in this research;
- Explain how each construct will be measured;

- Explain the correlation between the constructs.

### 3.3 Data collection and research methods

Outline the general methods for collecting the data. This may include surveys, interviews or observations.

### 3.4 Data analysis

The next step is to analyze the data. There is a clear distinction between analyzing quantitative and qualitative data. Analyzing numbers is a different sport than unravelling and interpreting text fragments. In the case of quantitative data you are going to process the numerical data with the help of a statistical program, after which you can use graphs and tables to make statements in relation to your sub-questions. For qualitative data there are different methods of analysis, depending on the data collection method you have chosen. Typical for these methods is that you should organize written or spoken texts and extract and analyze the core (see Chapter 9).

## 4. Planning and budget (costs)

Make a schedule for the research phases/ steps which contains:

- Think about the activity (which tasks you need to carry out)
- In which period: specify in dates
- Deadline (of the activity)
- Specification in hours of the tasks
- Take contingencies into account and identify them as possible risks

### 4.1 Planning

Research phase	Activity	Period	Deadline	Time registration	Possible risks

### 4.2 Budget

Give an overview of the total costs.

## References (literature list)

Follow APA guidelines regarding use of references in text and in the reference list.

## **Appendixes**

The following materials are appropriate for an appendix:

- Questionnaires
- Table of Analysis
- Original scales
- Interview protocols
- Observation forms (see Chapter 8 &9)

## **Guidelines research paper**

You can use these guidelines for the set up of the research report.

We will discuss each element of the components in the form of the research report.

### **1. Components in the form of the research report**

#### Cover page

On the title page you write down a catchy title that covers the content of the research report.

#### Preface

A text in which you can devote a personal note to your research and express your gratitude.

#### Summary

Text in which you give a brief account of your research. The text can be made clear by means of headings. Make sure that the following sections are covered in the text:

##### - Research

Briefly state what your graduation assignment or professional assignment is and where your doing research into.

##### - Main question

Formulate the main question that is central to your research.

##### - Objective

Provide a brief description of the purpose of your research.

##### - Theoretical framework

Give a brief description of the theories you have used, so that there is a theoretical justification of the research.

##### - Research method

Describe the research design in which you will be able to use the method, the research strategy and the data collection briefly.

##### -Research results

Describe the main results and analysis of your research.

##### - Conclusion



In this section, you describe the core of all previous information and results and answer the main question. Please note that this text never contains new information.

- Recommendations

Recommendations consist of opinions with actions or acts. In this section, the part, you describe the most important recommendations with concrete actions that need to be carried out. The recommendations are derived from the conclusion.

### Table of contents

Overview of all chapters, paragraphs, bibliography and appendices of the research report.

Possibly a list with abbreviations or glossary.

Presentation of all abbreviations or definitions of terms used in the text.

## **2. Parts on contents**

We will now move on to the content of the sections.

### Introduction

Text in which the content of the research report is briefly introduced.

### Theoretical framework

Text in which the theoretical justification for the research is described on the basis of theories, visions, ideas and models from the literature. This is where the information from legal sources and literature, the preliminary research is underlying. This theoretical text can be used in one or more of the chapters. The theories are processed on the choice of design of the chapters.

### Research design

Text setting out the justification for the design and conduct of the research is described. You will pay attention to the method, research strategy, data collection and underpin the choices you made in this. This text can be included in the introduction or you can draw attention to this in detail in a separate chapter.

### Results

Actual presentation of all results resulting from the study. These results can be supported with statistics, figures, graphs and tables. You must be able to analyze and interpret the results in the light of the theoretical framework. It is important to be able to

present the results clearly and to make a connection between the results and the theoretical framework, so that you can interpret them in the light of the theoretical framework.

### Conclusion

The final part of a chapter or report does not contain any new information. In this chapter you interpret the research results, give the findings and repeat the most important results from your research. You will also give answers to the main question and sub questions. You base your conclusion on the results of your research and do not add any new information.

### Discussion (optional)

The 'Discussion' section is not always mandatory, so please refer to the requirements of your education to the research report. For example, your programme may also ask you to dedicate a paragraph to a well-founded critical vision.

The problem you have investigated, a reflection on the research or the professional product and the achievement of your objective. In the reflection you look back at your personal contribution, the research itself and the way in which you conducted the research. Questions that you can use as a supplement to the reflection are: What went well and what went less well in the execution of your research when you look back at your research design and execution? What would you do in a do further research differently? In addition, you indicate whether you want to achieve the objective and whether the final result of your research has contributed to this.

In the text 'Discussion' you pay attention to the points of criticism on your bottom line. The text you place in a paragraph at the conclusion or in a separate chapter.

### Recommendations

In this text, you describe recommendations that can be traced back to the conclusion.

The recommendations must have an added value for the (social) legal professional practice, so that the situation could be changed or improved.

The added value for the professional practice must be clear and practical.

In addition, recommendations must be concrete, achievable and enforceable. You do this by clearly including the action points that arise from the recommendations: indicate how you can work with them in professional practice in order to change or improve the situation. It is also important that the recommendations are innovative. There is no point in giving recommendations that have already been implemented. You indicate which actions need to be carried out in order to be able to follow up the recommendations.

In short, recommendations consist of relevant advice and concrete actions that are derived from the conclusion.

### **3. The structure of a research report**

In a research report you will include the following chapters:

- a chapter in which you introduce the content of the research;
- chapters or sections in which the (social) legal problem, the context and parts of the problem description;
- a chapter or several paragraphs in several chapters in which you describe the theoretical justification;
- a chapter or paragraph on the method of research in which you describe the to account for its investigations;
- one or more chapters in which you describe the research results;
- a chapter conclusion in which you give an answer to the main question;
- A chapter on discussion or a paragraph on discussion in the chapter on conclusion and discussion in which you give a critical reflection on the research.

Consult the requirements of your study programme;

- a chapter of recommendations or paragraph of recommendations in the chapter

Conclusion and recommendations. Consult the requirements of your study programme.

### **4. Set up samples**

There are different ways of classifying your research report. We will give four setup examples.

#### Structure 1

Chapter 1: Introduction in which you explain the introduction, reason, problem description, goal of the study with the relevance for the benefit of the society and the legal professional practice, main question, sub questions, research justification and reading guide.

Chapter 2: Theoretical framework in which the theoretical justification is described.

Chapter 3: Presentation and interpretation of legal or practical results which together form the basis of the hang with sub question 1 and/or 2.

Chapter 4: Presentation and interpretation of legal or practical results which are related to hang with sub questions 3 and/or 4.

Chapter 5: Conclusion in which you interpret the research results and the main and the sub questions are answered.

Or Chapter 5: Conclusion and recommendations in which you interpret the research results and the main and the sub questions are answered. Then you make recommendations in a separate paragraph.

Start to introduce the chapter and formulate the main question. Then in paragraph 5.1, you answer the sub-questions and you work on the answers to the sub-questions.

In paragraph 5.2 Conclusion, you concretely formulate the answer to the main question.

Then, in section 5.3 Recommendations, you give your recommendation.

Finally, you end with a paragraph about your vision and reflection.

Or Chapter 5: Conclusion and discussion in which you interpret the research results, answers the main question and the sub-questions and a paragraph Discussion . You record the main and sub questions and work them out by elaborate in paragraph 5.1 the sub questions with questions/answers, to which you then finally answers the main question concretely in paragraph 5.2 Conclusion.

In section 5.3 Discussion, you describe the critical reflection on the research and process your vision and reflection.

Chapter 6: Recommendations in which you devote an entire chapter to your recommendations

that you describe on the basis of your research. After this there is a section Vision and Reflection on the research.

Or Chapter 6: Discussion in which you devote an entire chapter to your critical reflection on the research and your vision and reflection on it.

Bibliography: in accordance with the Guide for Legal Authors, unless your study programme makes other demands.

Annexes: Transcripts interviews and code tree, statistical data and all relevant documents from practice, sources of law and literature that support (social) legal research.

## Structure 2

Chapter 1: Introduction in which you explain the introduction, reason, problem description, goal of the thesis with the relevance for the benefit of the society and the legal professional practice, main question and reading guide.

Chapter 2: Accountability for research design and implementation.

Chapter 3: Part of the theoretical justification, (e.g. political-legal-social framework)

The report is based on a common framework (whereby sub questions 1 and/or 2 are to be answered).

Chapter 4: Part of the theoretical justification, e.g. a legal framework

(where you answer sub question 3 and/or 4).

Chapter 5: Conclusion in which you interpret the research results and the main question and the sub questions are answered.

Or Chapter 5: Conclusion and discussion in which you interpret the research results.

and answer the main question and the sub questions. In the paragraph Discussion you describe the critical reflection on the research.

Or Chapter 5: Conclusion and recommendations in which you describe the research results in an interdisciplinary way and answers the main question and the sub questions.

Chapter 6: Recommendations

You will give your recommendations on the basis of the research .

Or Chapter 6: Discussion

Bibliography; in accordance with the Guide for Legal Authors unless your study programme requires another Or H6: Discussion in which you devote an entire chapter to your critical reflection on the research and your vision and reflection on it.

Bibliography: in accordance with the Guide for Legal Authors, unless your study programme makes other demands.

Annexes: Transcripts interviews and code tree, statistical data and all relevant documents from practice, sources of law and literature that the Support (social) legal research.

### Structure 3

Chapter 1: Introduction in which you explain the introduction, reason, problem description, goal of the study with the relevance for the social and legal professional practice, main question, sub questions and research justification.

Chapter 2: Theoretical framework in which you describe the theoretical justification.

Chapter 3: Sub question 1 and/or 2.

Chapter 4: Sub question 3 and/or 4.

Chapter 5: Conclusion and recommendations or conclusion and discussion.

Or Chapter 5: Conclusion.

Chapter 6: Recommendations.

Bibliography: in accordance with the Guide for Legal Authors, unless your study programme makes other demands.

Annexes: Transcripts interviews and code tree, statistical data and all relevant documents from practice, sources of law and literature the support (social) legal research.

### Structure 4

Chapter 1: Introduction in which you explain the introduction, reason, problem description, goal of the study with the relevance for the benefit of the society and the legal professional practice, main question and reading guide.

Chapter 2: Theoretical framework in which you give the theoretical account.

Chapter 3: Accountability of research design and implementation.

Chapter 4: Sub question 1 and/or 2.

Chapter 5: Sub question 3 and/or 4.

Chapter 6: Conclusion and recommendations.

Bibliography: in accordance with the Guide for Legal Authors unless your study makes other demands.

Annexes: Transcripts interviews and code tree, statistical data and all relevant documents that support (social) legal research.

For all set-up examples, you should close each chapter with a brief paragraph in which you give a summary or interim (sub) conclusion. This together- the conclusion or interim (sub) conclusion- is based on the information provided in the chapter has been discussed.

## **5. Conclusion and recommendations**

In the setup examples you can see that the report ends with a chapter conclusion or a chapter recommendations. We will discuss this in more detail.

In the so-called final conclusion, you answer the main question and the partial question. It is important that you indicate that you have done research into the main question, because this was the central question during the research. In this chapter, the main question in the introduction is discussed.

In the conclusion, you give an interpretation of the research results and provide your clear answer to the main question and sub questions. The conclusion must be based on the research you carried out and the previous texts in the research report. So the conclusion may not be new information and reasoning.

You also indicate whether the end result has contributed to the purpose of the research. You do this by looking at your end result. After all, the end result must contribute to the objective of your research.

In order to answer the main question, you have divided it into several parts partial questions. These sub questions give answers in parts, per sub question, together on the main question. For the sake of the structure in your report, it is advisable to sub-divide the sub questions and answer them separately. This gives you a question and answer structure. This provides an overview.

After answering the sub questions, in this final chapter you will find a paragraph (final) conclusion in which you actually answer the following questions and main question. After all, research revolves around the main question. In this paragraph, you look back at the main question and connect the answer with the question that was central to the research.

What can you conclude from the research results of all sub questions? Analyze the answers or the research results of these sub questions and look back at the main question. What do these research results mean for your main question? Once you have analyzed the research results, you can answer the main question and include this answer in the conclusion. After all, the answers are based on the previous information from the sub questions.

### Example

#### *Chapter 5 Conclusion and recommendations*

*“In this research, the main question is central: How can the decline in problematic debts of clients in the municipality of Rotterdam within a year after they have completed a debt restructuring process be explained from the perspective of the public authorities?”*

*This main question is divided into three sub questions. For each sub question, the question is answered and the main question is answered in the conclusion.*

#### *§ 5.1 Sub questions*

*1 How does a fall in problematic debts of clients occur within one year after they have completed a debt restructuring process?*

*Unsubscribe the answer under this sub question.*

*2 What is the nature and size of clients in the municipality of Rotterdam who*

*have to go through another debt restructuring process for a year?*

*Write out the answer under this sub question.*

*3 Which statements based on motivation theories are applicable to clients that fall back on problematic debts?*

*Write out the answer under this sub question.*



## § 5.2 Conclusion

*The way in which the fall in problematic debts of clients in the*

*municipality of Rotterdam within one year after they have completed a debt restructuring process can be explained by Vroom's expectation theory.”*

Based on your conclusion, you make recommendations, so that you contribute to a solution to the problem you've been researching.

Based on the conclusion, you can make recommendations for the research topic. A recommendation is an opinion that contains concrete action points for the legal profession. The recommendations should have a (legal) added value for the professional practice and should be achievable. The field of activity must have a concrete advice that can be used in actions can be translated. There is no point in including recommendations that do not add value to the legal problem you are investigating. The recommendations should also contain action points or actions and be in line with the conclusion of the study, so that there is a connection with the main question. In addition, the action points or actions must be concrete and feasible for the (social) legal profession. Everything falls and stands with the main question. It is recommended that the recommendations are published in a to include a new sub-paragraph in order to maintain the structure.

## **SPSS: Creating a Dataset**

This is a basic instruction for creating a dataset in SPSS. Depending on the students' progress and the depth of the course, you can explore further analyses and features of SPSS in follow-up lessons.

### **Learning objectives:**

- You will learn how to define variables in SPSS.
- You will learn how to enter data in SPSS.
- You will become familiar with the basic functionalities of SPSS.

### **Materials Needed:**

- SPSS software installed on computers.
- Pre-prepared data to be entered (e.g., survey data).

### **Instructions:**

#### **1. Opening SPSS**

- Start the SPSS software.
- Once opened, you will see the “SPSS Data Editor” window. This window is divided into two views: “Data View” and “Variable View”.

#### **2. Defining Variables**

- First, all variables, the characteristics of your respondents, must be defined. For example, if your first survey question asks the following question, ‘What is your age?’, then in variable view you create the variable ‘age’. Next, you code the response options. You do this for all variables, which creates your codebook. Then you know how you can process the answers of the respondent in the program and you guarantee that this is the case. In “Variable View,” you can set up the structure of the dataset by adding variables.
- You proceed sequentially as follows:
  1. Open “Variable View” (second tab at the bottom left).
  2. Take your survey and enter the variable per question (i.e. one by one) from left to right. Observe the instructions below.
    - Name: give your variable a name. This should be one word that covers the scope of the survey question. Note: the word may contain up to eight characters.
    - Type: you prefer to work with numbers, so enter numeric here.

- Width: how many characters does the code need? Number of spaces, characters that your code will take up, including the comma. For example 10.50 is equal to five characters.
- Decimals: how many decimals (zeros after the comma) do you need for the variable? Usually 0 unless it is a question with exact numbers for example, in the case of percentages.
- Label: for each variable, type in the literal survey question that the variable appears in.
- Values: the value of a category, here you categorize the answers. For example, for the survey question 'What is your gender?' you categorize male = 0; female = 1.
- Missing values: sometimes a respondent forgets to fill in a question. Answers are then missing and you have to define them in values. Via the 'missing' column you get to the 'missing values' dialog box. The code 99 or 999 is usual in SPSS. Another kind of missing value is when students do not have to fill out a question because it does not apply to them. For that kind of missing value the code 88 or 888 is usually used in SPSS. If no answer was given (for example, if the respondent forgot to answer or if they had to skip a question (for example, if you answered yes to question x, then go on to question y) then you can give these missing values a special code in SPSS. Usually 9 and 99 are chosen.
- Measure: level of measurement; nominal, ordinal, interval or ratio. In SPSS, measurement levels are represented as follows:
  - Nominal: for nominal data, i.e. answer categories that cannot be counted on and do not involve ranking; for example, gender, residence, and questions where the answer is 'yes' or 'no'.
  - Ordinal: for ordinal data, i.e. answer categories that have an order but cannot be calculated; for example, age categories, income classes, education levels or questions with a scale.
  - Scale: for interval and ratio data, i.e. answer categories that can be calculated; for example numeric variables such as income or age where no pre-sorted categories are used.

### Example Variables:

- **ID** (unique identification number for each respondent)
- **Age** (age of the respondent)
- **Gender** (gender of the respondent, e.g., male, female, other)
- **Education Level** (highest level of education achieved)

### Entering Variables:

1. **ID**:
  - Name: ID
  - Type: Numeric
  - Width: 8
  - Decimals: 0

- Label: Unique identification number
  - Values: Not applicable
  - Missing: None
  - Columns: Default
  - Align: Right
  - Measure: Nominal
- 2. Age:**
- Name: Age
  - Type: Numeric
  - Width: 3
  - Decimals: 0
  - Label: Age of respondent
  - Values: Not applicable
  - Missing: None
  - Columns: Default
  - Align: Right
  - Measure: Scale
- 3. Gender:**
- Name: Gender
  - Type: Numeric
  - Width: 1
  - Decimals: 0
  - Label: Gender of respondent
  - Values: 1 = Male, 2 = Female, 3 = Other
  - Missing: None
  - Columns: Default
  - Align: Right
  - Measure: Nominal
- 4. Education Level:**
- Name: EducationLevel
  - Type: Numeric
  - Width: 1
  - Decimals: 0
  - Label: Highest level of education achieved
  - Values: 1 = Primary education, 2 = Secondary education, 3 = Higher education, 4 = University
  - Missing: None
  - Columns: Default
  - Align: Right
  - Measure: Ordinal

### **3. Entering Data**

- Click on the “Data View” tab at the bottom of the screen.
- Enter the data under the corresponding columns (variables). Take your first survey and fill in the corresponding answer for each variable (so work from left to right). Make sure that you fill in the codes as indicated earlier under ‘values’. It

helps to turn on the 'view data label' function, so that it is easier to enter the codes you indicated earlier.

### **Example Data:**

#### **ID Age Gender EducationLevel**

1	23	1	3
2	30	2	4
3	22	2	2
4	28	1	3

- Type this data into the corresponding cells.

### **4. Saving the Dataset**

- Go to "File" in the menu bar.
- Select "Save As...".
- Choose a location on your computer and give the file a name.
- Make sure the file type is ".sav" to keep it as an SPSS file.
- Click "Save".

### **6. Conclusion**

- Review the steps again and answer any questions the students may have.
- Optionally, give them an assignment to create their own dataset with different variables and data.

## **SPSS: Analyzing Data**

This basic instruction will help students learn to analyze data in SPSS using frequency tables, charts, and cross-tabulations, providing them with essential skills for data analysis.

### **Learning objectives:**

- You will learn how to create frequency tables in SPSS.
- You will learn how to create charts in SPSS.
- You will learn how to create cross-tabulations in SPSS.

### **Materials Needed:**

- SPSS software installed on computers.
- Pre-prepared dataset (or students can use the dataset created in the previous lesson).

### **Instructions:**

#### **1. Opening SPSS**

- Start the SPSS software.
- Open the dataset that will be used for analysis (File > Open > Data...).

#### **2. Creating Frequency Tables**

- Frequency tables are used to summarize categorical data.

### **Steps:**

1. Go to the menu bar and select “Analyze”.
2. Choose “Descriptive Statistics” and then “Frequencies...”.
3. In the Frequencies dialog box, move the variable(s) you want to analyze into the “Variable(s)” box. For example, choose “Gender”.
4. Click “OK”.

### **Interpretation:**

- The output window will display the frequency table, showing the count and percentage of each category within the variable.

#### **3. Creating Charts**

- Charts are useful for visually representing data.

### **Steps for a Bar Chart:**

1. Go to the menu bar and select “Graphs”.
2. Choose “Chart Builder”.
3. In the Chart Builder dialog box, choose “Bar” from the “Gallery” tab.
4. Drag the “Simple Bar” chart icon into the chart preview area.
5. Drag the variable you want to display on the x-axis (e.g., “Gender”) to the x-axis.
6. Click “OK”.

### **Steps for a Pie Chart:**

1. Go to the menu bar and select “Graphs”.
2. Choose “Chart Builder”.
3. In the Chart Builder dialog box, choose “Pie/Polar” from the “Gallery” tab.
4. Drag the “Simple Pie” chart icon into the chart preview area.
5. Drag the variable you want to display (e.g., “EducationLevel”) to the slice by box.
6. Click “OK”.

### **Interpretation:**

- The output window will display the chosen chart, visually showing the distribution of the selected variable.

## **4. Creating Cross-tabulations**

- Cross-tabulations (crosstabs) are used to examine the relationship between two categorical variables.

### **Steps:**

1. Go to the menu bar and select “Analyze”.
2. Choose “Descriptive Statistics” and then “Crosstabs...”.
3. In the Crosstabs dialog box, move one variable to the “Row(s)” box and another variable to the “Column(s)” box. For example, move “Gender” to Rows and “EducationLevel” to Columns.
4. Click “OK”.

### **Optional: Adding Chi-Square Test**

- To test the statistical significance of the relationship between the variables, you can add a Chi-Square test:
  1. In the Crosstabs dialog box, click the “Statistics” button.
  2. Check the “Chi-square” option.
  3. Click “Continue”, then “OK”.

## **Interpretation:**

- The output window will display the crosstab table, showing the frequency count for each combination of categories between the two variables.
- If the Chi-Square test was added, the output will also include the Chi-Square statistic and p-value, indicating whether there is a statistically significant association between the variables.

## **5. Conclusion**

- Review the steps with the students and ensure they understand how to interpret the output.
- Encourage students to practice creating frequency tables, charts, and cross-tabulations with different variables in their dataset. If you present your research results using graphs and tables, it is important to be selective in what you present in your report. It becomes an overkill of figures if you print out a graph or table for a large part of the variables. Focus on the variables that provide clear information regarding your sub-questions. Any other graphs and tables can be put in the appendix. Furthermore, it is important to give a clear explanation of your tables and graphs. You cannot assume that the reader of your research report will understand how to interpret the results that are presented. Express in concise, clear terms what is revealed in the figure. Do not draw any conclusions yet, but do make any links between your results and your sub-question.