

On writing term paper for SOS3003 Part II

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1

The structure of a paper

- **Title page**
- **Preface**
- **Abstract**
- **The main body of the paper**
- **References**
- **Appendices**

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2

Title page

There has to be

- **TITLE**
- **STUDENT NUMBER**

– You may add other things as you find appropriate on a title page

- The paper do not need more binding than staples

Preface

- In a preface the appropriate acknowledgments are presented.
- If the data used have been collected by SSB (Statistics Norway), SSB should be acknowledged and absolved of responsibility for the interpretations, for example by saying:

Acknowledgement of data source

- “(Some of the) Data used in the present publication have been taken from (...name of the data set...). Data in anonymous form were made available through the Norwegian Social Science Data Service (NSD). Data were originally collected by Statistics Norway. Neither Statistics Norway, nor the Norwegian Social Science Data Service has any responsibility for the analysis or interpretations presented here.”
- For municipal or county data, or data from other sources than SSB and NSD, the formula should be adapted appropriately.

... eller på norsk

- "(En del av) de data som er benyttet i denne publikasjonen er hentet fraundersøkelsen (årstall). Data i anonymisert form er stilt til disposisjon gjennom Norsk samfunnsvitenskapelig datatjeneste (NSD). Innsamling og tilrettelegging av data ble opprinnelig utført av Statistisk Sentralbyrå. Hverken Statistisk Sentralbyrå eller NSD er ansvarlige for analysen av dataene eller de tolkninger som er gjort her."
- For kommunedata skriv ein ikkje «i anonymisert form».

Abstract

- An abstract or summary will comprise 100 – 200 words summarizing very briefly the data source and the main findings. The abstract should be formatted separately, with spacing of 1.0

The main body of the paper

- The abstract, the main body of the paper, and references are limited to a maximum of **10.000 words** as counted by Microsoft Word

References and Appendices

- The list of references should follow some accepted standard.
- One or more appendices will include tables, figures (graphs), and a little explanatory text to describe aspects of the data relevant to variable transformations, scale construction, tests for additional variable transformations, tests for violations of statistical assumptions, and the examination of influential outliers.
- There is no size limitation for the appendices. However, in most cases about 5 – 15 pages, as appropriate to the particular analyses presented, will be sufficient.

Requirements (1)

1. Based on descriptive statistics for the variables included in the model, their distributions shall be investigated and possible transformations considered. Transformations should be used if their use will improve the analysis (i.e. if there are theoretical reasons to believe that the marginal relationship between explanatory variable and dependent variable is curvilinear (see pt 4 below) or if use of transformations will make tests more trustworthy (i.e. the residual is closer to a normal distribution).

Requirements (2)

2. The model must contain at least one nominal scale variable with more than 2 categories.
3. Possible interaction among variables shall be considered and at least one interaction term has to be tested.
4. Possible curvilinear relationships have to be considered and at least one curvilinear relationship has to be tested.
5. At least one “conditional effect plot” should be presented and interpreted.

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11

Requirements (3)

The following problems have to be discussed

6. Multicollinearity has to be considered
7. The impact of outliers and influential cases has to be considered
8. The model specification has to be evaluated.
9. In OLS regression heteroskedasticity has to be considered
10. In OLS regression autocorrelation has to be considered
11. In OLS regression the distribution of the residual has to be considered
12. In LOGIT regression the problem of discrimination has to be considered

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12

Requirements (4)

- For all models important and relevant tests of significance, parameters, coefficients of determination, and sometimes confidence intervals, have to be report and correctly interpreted.
- At the end the results should be discussed in relation to the original problem.

Advice (1)

- The detailed requirements presented in points 1-12 cannot be used as a blueprint for writing the paper. Not all of this will be expected to be found in the body of the paper. In the text much may be briefly mentioned while the documentation will be in the appendices.

Advice (2)

- The most important part of the work is the model specification. The tools for diagnosis are important to improve the model specification (e.g. interaction terms, curve elements, variable transformations) and clarify problems of interpretation (e.g. distribution of the residual, impact on dependent variable when the relationship is curvilinear)

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15

Advice (3)

The main body of the paper might be structured like this (1)

- An introduction of 1/3-1p stating the research question and describing why the research question is interesting and/ or valuable
- A short discussion of theory relevant to the research question(1-3p)
- A short summary/mention of previous research relevant to the question(1-2p)
- A description of main hypotheses(1-2p)

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16

Advice (3)

The main body of the paper might be structured like this (2)

- A description of the data set, the dependent variable (in some detail) and the independent variables (in much less detail)(1-2p)
- A description of the analysis results based on the basic beginning model, tests for more complicated effects, eliminated variables, and the final model (7-13p)
- A short concluding section, summarizing important findings. This could be about 1p, longer than the concluding statements in the abstract, which should be only 1-3 sentences (in the abstract)