

Report on Bachelor / Master Thesis

Institute of Economic Studies, Faculty of Social Sciences, Charles University

Student:	Bartušek Daniel
Advisor:	doc. PhDr. Havránková Zuzana, Ph.D.
Title of the thesis:	The Effect of Temperature on Suicide: A Meta-Analysis

OVERALL ASSESSMENT (provided in English, Czech, or Slovak):

Please provide a short summary of the thesis, your assessment of each of the four key categories, and an overall evaluation and suggested questions for the discussion. The minimum length of the report is 300 words.

Short summary: The author follows the newest methodology for meta-analysis and study the effect of temperature on suicides. The thesis readable, topic interesting and the estimation framework advanced for bachelor (and even master) thesis. On the other hand, due to its demanding nature and high research requirements I rise several points to enhance Daniel's future work.

Contribution: As author himself admitted, there is already one meta-analysis written on that topic (Gao et al., 2019). But it has very limited dataset (31 observations) and their research is also not so comprehensive. So Daniel did a great job by summarizing larger number of estimates (186 observations from 31 studies) and subject them to the proper meta-analytical investigation. His results are also convincing. He shows that the effect of temperature on suicides is three times less than suggested earlier.

Methods: The author used the state-of-art method for meta-analysis. He analyzes the publication bias via graphical and formal tests. He includes even the modern non-parametrical methods in search for the true effect. Then the heterogeneity is scrutinize by BMA and FMA and implied estimates are suggested. On the other hand, the dataset a bit small. Moreover, it is mentioned that Bom-Rachinger methodology for publication bias cannot be used – when I check the vast number of methods used, I think author does not have to mention the one, he did not use. Besides, in the BMA section I find in the baseline regression only two variables with PIP above 0.5, which is a very small number. On the contrary, in the robustness check there appears about seven such variables. Thus, I have question about the results stability (it is often problem with small samples).

Literature: Author cites all relevant literature with respect to the topic and given methodology. He even addresses the issues in the article he wants to supersede. On the other hand, the citations in brackets is done often without comma, for instance: (Sher 2020), instead of (Sher, 2020).

Manuscript form: The thesis uses high-quality English. The formatting is also of high quality, but I have several comments for it. The widows and orphans occur sometimes (e. g. In the key words, or in the last line of the introduction). The English is maby not so though in that, but at least on the most visible places it should be regarded. Moreover, I do not think that Czech abstract correspond to English one in the part: „vliv teploty na míru sebevražd je třikrát menší, než hodnota prezentovaná v předchozí meta-analýze, což považujeme za ekonomicky nevýznamné.“ It seems to me, that the fact „three time smaller“ is insignificant, but in English abstract the final effect of temperature on suicides is insignificant. Last but not least, other paragraphs are cohesive and easy-to-read.

Overall evaluation and suggested questions for the discussion during the defense

Based on my comments above I have several questions for the thesis defence.

1. The data sample consists of only 186 observations. What is the minimal number of onservations for conducting a meta-analysis?
2. When estimating the data by OLS, you need to satisfy some criteria (e. g. Homoskedasticity, normality, or something less demanding). What do you need to satisfy when using meta-analytical framework?
3. In the estimating the publication bias in the table 4.2 only „mean beyond bias“ is reported. Why the standard error effect is not captured as well as in case of table 4.1?
4. Are you not afraid about stability of you results?

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Despite several critical points I think that Daniel did a good job as bachelor student. From my perspective, the thesis fulfills the requirements for a bachelor thesis at IES, Faculty of Social Sciences, Charles University, I recommend it for the defense and suggest a grade A. Besides the results of the Urkund analysis do not indicate significant text similarity with other available sources.

SUMMARY OF POINTS AWARDED (for details, see below):

CATEGORY	POINTS
<i>Contribution</i> (max. 30 points)	27
<i>Methods</i> (max. 30 points)	27
<i>Literature</i> (max. 20 points)	19
<i>Manuscript Form</i> (max. 20 points)	18
TOTAL POINTS (max. 100 points)	91
GRADE (A – B – C – D – E – F)	A

NAME OF THE REFEREE: Josef Bajzík

DATE OF EVALUATION: 25. 5. 2021

Digitálně podepsáno (25. 5. 2021)
Josef Bajzík

Referee Signature

EXPLANATION OF CATEGORIES AND SCALE:

CONTRIBUTION: *The author presents original ideas on the topic demonstrating critical thinking and ability to draw conclusions based on the knowledge of relevant theory and empirics. There is a distinct value added of the thesis.*

METHODS: *The tools used are relevant to the research question being investigated, and adequate to the author's level of studies. The thesis topic is comprehensively analyzed.*

LITERATURE REVIEW: *The thesis demonstrates author's full understanding and command of recent literature. The author quotes relevant literature in a proper way.*

MANUSCRIPT FORM: *The thesis is well structured. The student uses appropriate language and style, including academic format for graphs and tables. The text effectively refers to graphs and tables and disposes with a complete bibliography.*

Overall grading:

TOTAL	GRADE
91 – 100	A
81 - 90	B
71 - 80	C
61 – 70	D
51 – 60	E
0 – 50	F