



## POSUDEK MAGISTERSKÉ DIPLOMOVÉ PRÁCE

### Posudek oponenta

Autor práce: Hana Šiková

Název práce: Structure of motivational factors for vaccination against COVID-19

Autor posudku: Jaromír Mazák

Návrh klasifikace práce: *výborně*

#### Základní charakteristika práce.

The thesis investigates the structure of positive motivational factors for vaccination against COVID using survey data and applying Belief Network Analysis (BNA, a specific application of social network analysis). Among other things, the text concludes that motivational factors largely differed between people based on the time when they registered for vaccinations and surprisingly little based on socio-demographic predictors.

### KONCEPČNÍ STRÁNKA PRÁCE

#### Má práce jasně formulovaný záměr, cíl, výzkumnou otázku a odpovídají jim závěry?

The goal of the thesis is clearly formulated: investigating motivational factors and their structure for a sample of Czech adult (online) population and compare selected subgroups in terms of their motivations. An application for the findings is also suggested: informing potential future vaccination campaigns.

#### Má práce adekvátně stanovenou a jasně vyloženou metodu a postup řešení?

The method and its individual steps is clearly explained.

#### Jsou jednotlivé části práce (zejm. teoretická a empirická) vyvážené a vhodně propojené, vytváří text konzistentní celek?

The text as a whole is mostly consistent and individual parts form one logical whole even if the translation of theory into modelling strategy could be more explicit. Relevance of some sections in the theoretical part for the goal of this thesis was not always clear to me.

#### Jsou argumentace a text práce a vystavěny logicky, jasně, srozumitelně? Má práce přehlednou strukturu?

The argumentation is clear and not difficult to follow, even if a bit too lengthy at times.

### OBSAH PRÁCE

**Hodnocení kvality teoretické části práce** (relevance k tématu a záměru práce, šíře a hloubka, vhléd autora do problematiky, samostatnost, originalita zpracování,...).

The theoretical part consists of factual contextualization of the COVID pandemic (arguably not necessary for the thesis, but a welcome context and concise enough for me to appreciate), and a discussion of selected theoretical approaches to the vaccination decision. While I enjoyed reading about these approaches, it occurred to me that their selection is somewhat arbitrary or random and that others might easily select different theoretical approaches to support the same empirical analysis. It is OK, but I would appreciate a brief explanation why these (and not other) theories were selected. In addition, the link among theories and the empirical part could be more elaborate. The different approaches are compared and then the jump to the empirical part happens very quickly. The operationalization part is very thorough. It signals that the author did a solid literature review for the selection of motivational factors included in the analysis.

**Hodnocení kvality empirické části práce** (adekvátnost použitých metod a postupů vzhledem k cíli práce, správnost aplikace metod a postupů, prezentace a interpretace výsledků,...).

The empirical part demonstrates strong skills in applying advanced data processing and visualization techniques. I am not very familiar with Belief Network Analysis so I enjoyed reading through its application. However, I am not convinced that the theoretical advantages over latent factor analysis (i.e., not having to assume a latent factor) are very relevant given that no claims about causality between individual factors are made and that the perspective applied is not dynamic (not in time). While this does not mean that BNA should not be used, I missed explicit discussion of the following question: apart from having some theoretical advantage over latent factor analysis, does the method have any specific advantages in this particular case?

As a reader, I would appreciate fewer plots and tables in the primary text: selection of the most important ones and moving the rest to the appendices section. The duplication of graphical and tabular outputs makes the whole section harder to digest. In addition, many outputs would not be readable in printed version. (High quality graphics used in the document allow for zooming in, so this is not a big issue in the electronic text, but less plots would make it easier to also make them bigger as default.)

**Hodnocení diskuse a závěrů práce** (soulad interpretací a závěrů s výsledky empirických analýz, provedení diskuse závěrů, snaha o vysvětlení závěrů a jejich argumentace, zodpovězení výzkumných otázek, naplnění cílů práce).

The discussion is a very important part as it highlights the most important empirical findings and abstracts from individual plots and tables the important generalizations. I appreciate the extensive section on limitations, though I missed some consideration of the limits due to relying on respondents to determine importance of individual factors for themselves. The critique of such an approach, long present in economics and perhaps more recently also in behavioural psychology objects that people are not great at assessing the “why” of their behaviour and different rationalizations obscure the true motives.

## FORMÁLNÍ ASPEKTY PRÁCE

**Hodnocení naplnění kritérií odborného textu** (rozsah práce (BP 72-126 tis. znaků, DP 108-162 tis. znaků) citační normy, odkazy, popis datových zdrojů, jasnost odlišení myšlenek autora od převzatých, seznam literatury atd.)

I have no objections.

**Hodnocení vhodnosti a úplnosti využití informačních zdrojů** (literární prameny, databáze, zahraniční literatura, datové zdroje,...)

The literature review is amazingly thorough and literature lists might as well be a literature list for a dissertation.

**Hodnocení jazykové, stylistické a grafické úrovně práce** (grafická úprava, členění textu, označení příloh, zpracování tabulek, grafů, schémat atp.)

The English in this thesis is on a very high level, reads easily and feels professional. The graphical standard of the thesis overall is very high.

**Další poznámky**

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**Celkové hodnocení práce**

The thesis is remarkably thorough both in terms of literature review and in terms of analytical tools used. While this demonstrates skill and ability to go deep into a topic, I might suggest trying to simplify things at the end a little (and perhaps move some parts in the appendix).

Overall, I appreciate the apparent fascination of the author with the topic combined with sober, careful, and rigorous approach in interpreting the results and acknowledging limitations. The findings are an interesting contribution to studying people's motivational factors for vaccination, even if I doubt their direct applicability without further research and corroboration: I think the assumption that central nodes in the network may be perceived as causes of also the other factors and hence be targeted with communication is rather strong (meaning it assumes a lot) and I am also sceptical about people's ability to report their own motives (generally and in this particular scenario). Nonetheless, this thesis shows rigour, is very advanced in many respects for a Masters thesis and I propose an A („výborně“).

**Otázky a náměty k obhajobě**

At the defence, I would like to discuss the following issue: At some points, the author acknowledges controversy as of what interpretation of centrality of individual factors in BNA actually allows. Yet she also states:

„Social motivations (such as protecting others and helping build herd immunity) are often the least central. This is in alignment with the perspectives of the models presented in 3, which also concentrate on the individual perspective. This does not mean that protection of others would be unimportant for the respondents, in absolute evaluation it scored highly, but rather that it is not a

formative belief. This finding is in sharp contrast to the suggestion of Sherman et al. (2021, p.1617), as well as Becchetti et al. (2021, p.8), that highlighting altruistic reasons should be effective in promotion of the vaccine.“ (p. 115)

How could we test or support the notion that centrality really can be interpreted in terms of being a formative belief? (And what does formative belief actually means in the context?)

What theoretical arguments could be made in favour of effectiveness of highlighting altruistic reasons? What arguments against it?

Datum:

Podpis: