BMF CP28: Teachers' strategies to maintain secondary school students' concentration during online teaching

Phuong-Loan Nguyen
Email: loan.nguyen@hanu.edu.vn

March 12, 2023

1. Project description

1.1. Main objectives

During online learning, many options to maintain students' concentration become not feasible or challenging to be implemented, such as physical activity, game playing, task breaking, etc. This situation requires teachers to spend more time communicating with students orally. The current study has three objectives, which are to:

1. Examine the effects of two oral communication strategies on secondary students' concentration during online learning and whether they have moderation effects on each other.
2. Examine the effects of two oral communication strategies on secondary students' active interactions with teachers during online learning and whether they have moderation effects on each other.
3. Examine whether students' sex affects their concentration and active interactions with teachers during online learning.

1.2. Materials

The mindsponge theory will be used for conceptual development, and Bayesian Mindsponge Framework (BMF) analytics will be used for statistical analysis on a dataset of 5,327 Vietnamese secondary students in Vietnam [1-3]. The bayesvl R package, aided by the Markov chain Monte Carlo (MCMC) algorithm, will be employed for statistical analyses [4-7]. For more information on BMF analytics, portal users can refer to the following book [8]. Data and code snippets of this initial analysis were deposited at: https://osf.io/6btwc/.

1.3. Main findings

The analysis shows that inviting students to answer questions and responding to their questions are two oral communication strategies that can improve students' concentration and active interactions with teachers during online learning (see Figures 1 and 2, respectively). Both these strategies have almost equivalent effect magnitudes on students' concentration and active interactions with teachers. We also find that students' sex does not affect their concentration and active interactions with teachers.

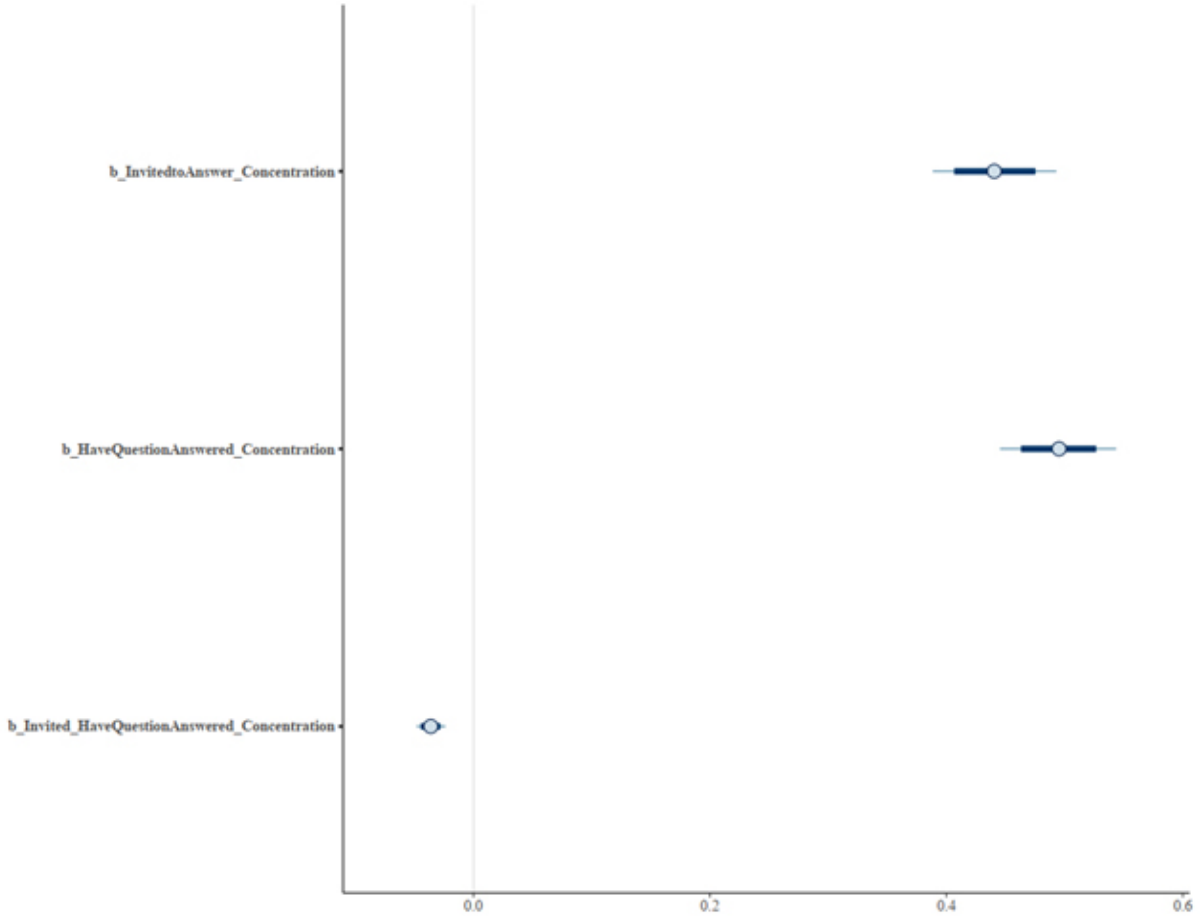

Figure 1. The coefficients indicating the communication strategies' effects on concentration

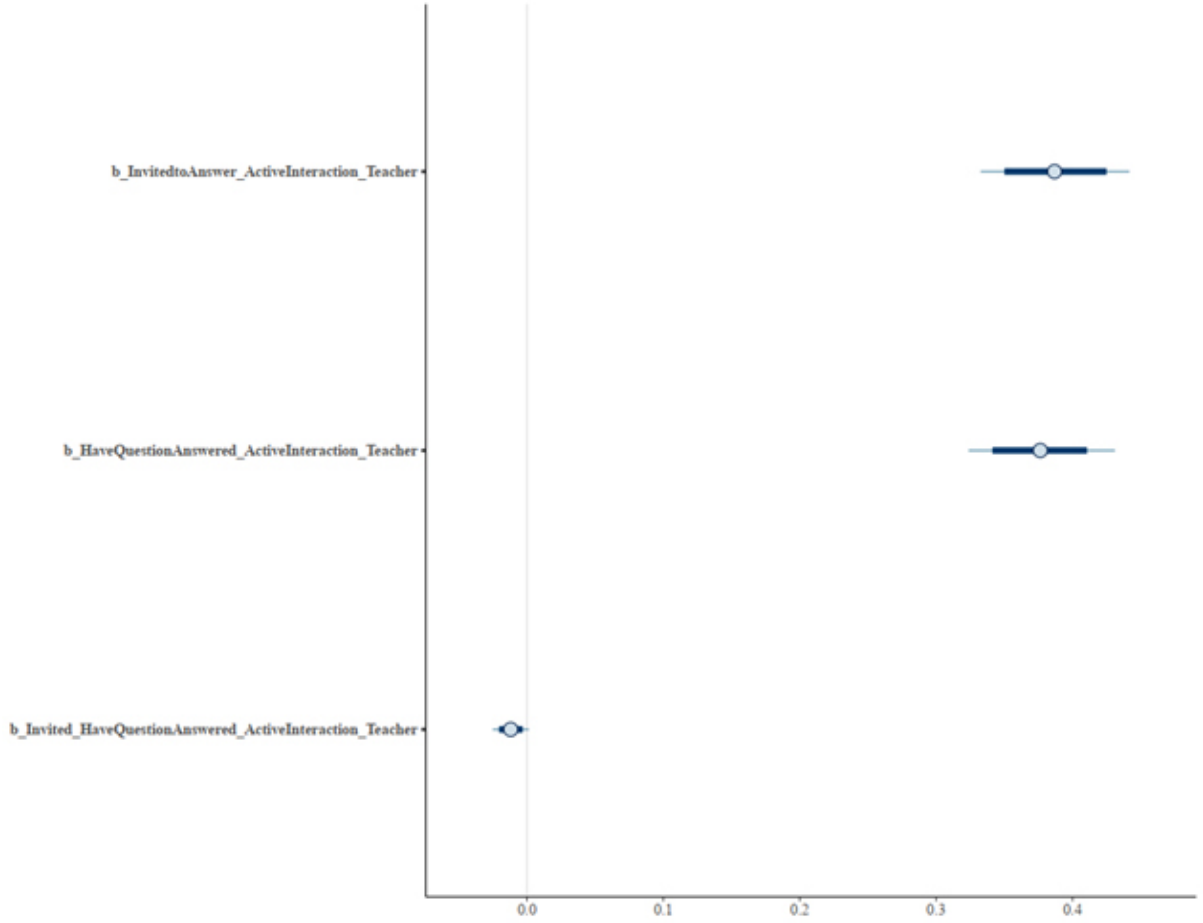

Figure 2. The coefficients indicating the communication strategies' effects on active interactions with teachers

2. Collaboration procedure

Portal users should follow these steps for registering to participate in this research project:

1. Create an account on the website (preferably using an institution email).
2. Comment your name, affiliation, and your desired role in the project below this post.
3. Patiently wait for the formal agreement on the project from the AISDL mentor.

If you have further inquiries, please contact us at aisdl_team@mindsponge.info

If you have been invited to join the project by an AISDL member, you are still encouraged to

follow the above formal steps.

All the resources for conducting and writing the research manuscript will be distributed upon project participation.

AISDL mentor for this project: Phuong-Loan Nguyen (loan.nguyen@hanu.edu.vn), Minh-Hoang Nguyen (hoang.nguyenminh@phenikaa-uni.edu.vn).

AISDL members who have joined this project: Quan-Hoang Vuong.

The research project strictly adheres to scientific integrity standards, including authorship rights and obligations [9], without incurring an economic burden at participants' expenses [10].

References

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