

Evaluation Committee of the Public Education Development Research Program of the Hungarian Academy of Sciences

Subject: Half-term report of the MTA-ELTE Psychomotor Development Research Group

Dear Scientific Committee!

Our research group was founded in 2021 with the cooperation of two faculties of ELTE University. We have chosen a topic that is new among educational research in Hungary, and at the international level, it looks back on a short 20-year period.

Within the framework of the tender, we started working on the project in September 2021. As a newly formed, small research group, activities began in parallel in several research areas. The electronic platforms were established for continuous research group consultations and the literature review process also began. Unfortunately, we ran into difficulties at the end of the first research year, because the doctoral student of the planned 2nd pillar of our research program (who was also an ELTE employee) terminated his legal relationship, which made the implementation of pillar "B" impossible. The efforts we had invested up to that point, our IT purchases, and our prepared publication could not be realized.

At the beginning of 2023, I informed Professor Benő Csapó† in detail about what had happened, and we modified our research plan to reflect the changed staff conditions and included two additional investigators from two other institutions (Dr. Kinga Révész-Kiszela and Dr. Mónika Kaj).

We had to find an alternative solution to address the problem and to meet the research publication expectations. The professional content of Pillar „A” and the data collection in this area was doubled compared to previous plans, including the study of university students in teacher education.

We have adapted Pillar „B” of the research plan and made the following changes to our program.

1. We have significantly supplemented and revised the research plan for Pillar „A” as follows:
 - a. In addition to the originally planned large sample survey, we included an additional target group, preservice teachers from 12 teacher education higher education institutions in Hungary. For this sample, an additional questionnaire had to be developed (MANEK-F, Hungarian Neuroeducation Questionnaire - Higher Education Version).
 - b. Following the development of the alternative questionnaire, teacher training institutions of higher education were included in the research, so that we have data on preservice teachers in addition to inservice teachers.
2. The data collection for the questionnaire has been expanded, and the database management tasks have essentially doubled.

In recent months, we have been engaged in an intensive process of writing papers and preparing conference abstracts and presentations, which has resulted in 7 scientific publications. These include 4 papers and 3 scientific conference presentations.

I report our progress based on the already revised research plan. I have indicated the achievement of milestones and their current status to the research activity in the relevant tasks. I have marked the planned timeline with a black X sign and the implementation with a red X. Where this is in the same cell, there is no delay with the task.

Milestones and achievements in the research plan

Our research activities are structured around 4 main themes. The 4 main themes are marked separately and their timelines and associated publication outputs are attached.

Theme 1: Literature review - Theoretical basis and evidence for movement therapies

The planned timetable for implementation:

| Activities | 2021.09.01- 2021.12.30 | 2022.01.01- 2022.07.01 | 2022.07.02- 2022.12.31 | 2023.01.01- 2023.07.01. | 2023.07.02- 2023-12.31 | 2024.01.01- 2024.12.31 | 2025.01.01- 2025.08.31 |
|-------------------|---------------------------|---------------------------|---------------------------|----------------------------|---------------------------|---------------------------|---------------------------|
| A/1 | | | | | | | |
| Preparation | | X X | | | | | |
| Literature review | | X X | X X | | | | |
| Analysis | | | X | X | X | | |
| Publications | | | | X | X X | X | |
| Dissemination | | | | | | X | X X |

Planned results of the project - 1 narrative literature review in Hungarian in a peer-reviewed journal, 1 scientific conference presentation

Achieved publications

Article

- 1) (Q4, IF:0,12) **Csányi Tamás**; Tóthné Kálbli Katalin; Svraka Bernadett; Révész-Kiszela Kinga és Víg Julianna (2023). *Neuromítoszok az oktatásban – tények és törekvések*. MAGYAR PSZICHOLÓGIAI SZEMLE, 78 (2). pp. 273-289. ISSN 0025-0279
<https://doi.org/10.1556/0016.2023.00007>
<https://m2.mtmt.hu/gui2/?mode=browse¶ms=publication;33731081>

Scientific presentation with abstract

- 2) **Csányi Tamás** és Horváth Dávid Ákos (2021) *Evidenciaalapú, hatékony oktatási megközelítések érvényesülése a gyermekek pszichomotoros fejlesztésében és testnevelésében*. Magyar Tudomány Ünnepe Tudomány: Iránytű az elérhető jövőhöz. ELTE TÓK. Nov.22.
<https://m2.mtmt.hu/gui2/?mode=browse¶ms=publication;32517030>

Theme 2: Literature review – Evidence-based movement testing procedures

The planned timetable for implementation:

| Activities | 2021.09.01- 2021.12.30 | 2022.01.01- 2022.07.01 | 2022.07.02- 2022.12.31 | 2023.01.01- 2023.07.01. | 2023.07.02- 2023-12.31 | 2024.01.01- 2024.12.31 | 2025.01.01- 2025.08.31 |
|-------------------|---------------------------|---------------------------|---------------------------|----------------------------|---------------------------|---------------------------|---------------------------|
| A/2 | | | | | | | |
| Preparation | | | XX | | | | |
| Literature review | | | X | X | | | |
| Analysis | | | | X | X | | |
| Publications | | | | | X | X X | |
| Disszemináció | | | | | | X X | X X |

Planned results of the project: 1 literature review in Hungarian in a peer-reviewed journal; 1 scientific conference presentation

Achieved publications – We are still in the analysis phase of this task. To meet the mid-term publication expectation, we have moved this activity to later, as we saw less chance of producing a Q1/Q2 study. During the first 2 years, the focus shifted to Theme 3, the analysis and publication of our empirical results. We plan to make these two publications in the second half of the research project.

Theme 3: Empirical study – Acceptance of neuromyths among Hungarian Preservice and Inservice teachers

The planned timetable for implementation:

| Activities | 2021.09.01- 2021.12.30 | 2022.01.01- 2022.07.01 | 2022.07.02- 2022.12.31 | 2023.01.01- 2023.07.01. | 2023.07.02- 2023-12.31 | 2024.01.01- 2024.12.31 | 2025.01.01- 2025.08.31 |
|--|---------------------------|---------------------------|---------------------------|----------------------------|---------------------------|---------------------------|---------------------------|
| A/3 | | | | | | | |
| Literature review | | X X | | | | | |
| Questionnaire development and adaptation | | | X X | | | | |
| Data collection and analysis | | | X | X | | | |
| Publications | | | | X | X X | X X | |
| Dissemination | | | | X | X | X X | X X |

Planned results of the project: 2 articles in a peer-reviewed English journal; 2 scientific presentations

Achieved publications

Articles

- 1) (Q1, IF:3,5) **Vig, J.**, Révész, L., Kaj, M., Kälbli, K., Svraka, B., Révész-Kiszela, K., & Csányi, T. (2023). *The Prevalence of Educational Neuromyths among Hungarian Pre-Service Teachers*. Journal of Intelligence, 11(2), 31. MDPI <http://dx.doi.org/10.3390/jintelligence11020031>

<https://m2.mtmt.hu/gui2/?mode=browse¶ms=publication:33606970>

Articles under peer review process

- 2) **Csányi Tamás**, Kälbli Katalin, Kaj Mónika, Svraka Bernadett, Vig Julianna (2023 vagy 2024). *Magyar pedagógusok és pedagógushallgatók idegtudományi műveltsége. Mennyire elterjedtek a neuromítoszok az oktatásban?* ÚJ PEDAGÓGIAI SZEMLE

<https://m2.mtmt.hu/gui2/?mode=browse¶ms=publication:34134502>

- 3) **Tóthné Kälbli Katalin**; Kaj Mónika; Vig Julianna; Svraka, Bernadett; Révész-Kiszela, Kinga és Csányi Tamás (202X). *Mozgással, mozgásfejlődéssel és mozgásfejlesztéssel kapcsolatos tévhitek előfordulása pedagógusszakos hallgatók és végzett pedagógusok körében*. MAGYAR PEDAGÓGIA

<https://m2.mtmt.hu/gui2/?mode=browse¶ms=publication:34163908>

Scientific presentations with abstracts

- 1) **Tóthné Kälbli Katalin**; Kaj Mónika; Vig Julianna; Svraka, Bernadett és Csányi Tamás (2023) *A mozgással, mozgásfejlődéssel és mozgásfejlesztéssel kapcsolatos tévhitekbe vetett hit előfordulása pedagógusszakos hallgatók és végzett pedagógusok körében*. XIV. Taní-tani (online) Konferencia, Hatékonyság és koherencia a pedagógiában, a gyógypedagógiában és a tanárképzésben. Miskolci Egyetem. 02.03

<https://m2.mtmt.hu/gui2/?mode=browse¶ms=publication:33769339>

- 2) **Csányi Tamás**, Kálbli Katalin, Kaj Mónika, Svraka Bernadett, Vig Julianna (2023). *A neuromítoszok elterjedtsége magyar pedagógushallgatóknál*. XIV. Taní-tani (online) Konferencia, Hatékonyság és koherencia a pedagógiában, a gyógypedagógiában és a tanárképzésben. Miskolci Egyetem. 02.03.

<https://m2.mtmt.hu/gui2/?mode=browse¶ms=publication;33769333>

Theme 4 - Develop evidence-based recommendations for public education and special education practice using the results of the first 3 research activities

The planned timetable for implementation:

| Activities | 2021.09.01- 2021.12.30 | 2022.01.01- 2022.07.01 | 2022.07.02- 2022.12.31 | 2023.01.01- 2023.07.01. | 2023.07.02- 2023-12.31 | 2024.01.01- 2024.12.31 | 2025.01.01- 2025.08.31 |
|-----------------------------|---------------------------|---------------------------|---------------------------|----------------------------|---------------------------|---------------------------|---------------------------|
| A/4 | | | | | | | |
| Preparation of publications | | | | | | X | |
| Dissemination | | | | | | | X |

Planned results of the project: *1 policy recommendations*

The recommendation package is one of the final tasks of our research program.

Problems encountered in implementing the research plan and its solutions

The amendment of our research plan was submitted on 07 February 2023 to Prof. Tamás Freund, President of the Hungarian Academy of Sciences. In the reply letter dated 16 February 2023, Professor Benő Csapó† declared his support for the amendment. The justification for the submitted amendment request was as follows.

"In the framework of the MTA's Public Education Development Research Call, our research team has undergone a significant change in the past year. Ákos Dávid Horváth, lecturer and doctoral student, terminated his employment at the ELTE Faculty of Primary and Pre-School Education, and at the same time, he left our research group. Due to this change of person, the research content of the "B" pillar of our research program, entitled "Characteristics and effects of motivation on physical activity in physical education lessons of adolescents", became unreachable. This pillar was based on the implementation of doctoral research.

The research team was proactive in finding a solution to the problem to meet the publication expectations, so we extended, in fact, doubled, the empirical data collection of our research theme 3, namely: "The prevalence of evidence-based teaching approaches among teachers of motor development in Hungary". In addition to a sample of practicing teachers, a representative sample of student teachers was included in the research, and an alternative version of our data collection method was developed. Our new results, based on a sample of nearly 800 respondents, have recently been published in a Q1-ranked journal, confirming the validity of our decision. We also included in the research team Dr. Kinga Révész-Kiszela from the Eszterházy Károly Catholic University and Dr. Mónika Kaj, biostatistician and expert at the Hungarian School Sport Federation.

In our revised research plan, new publications became available in a high-impact journal, which can be achieved by leaving out Pillar „B” and significantly expanding the publications of Pillar „A”. With the newly recruited sample, we will be able to increase our publication output and will undertake 2 Q1/Q2 studies. In this way, we will undertake an additional Q1/Q2 publication in line with the main performance expectations of the program, with a quality shift from the original peer-reviewed publication planned in Pillar B. Our first Q1 study has recently been published."

The missing publications will be completed over the next two years.

Important publications related to our research program

Important publications are also presented above in our report about the specific research tasks.

- 1) (Q1, IF:3,5) **Vig, J.**, Révész, L., Kaj, M., Kálbli, K., Svraka, B., Révész-Kiszela, K., & Csányi, T. (2023). *The Prevalence of Educational Neuromyths among Hungarian Pre-Service Teachers*. Journal of Intelligence, 11(2), 31. MDPI <http://dx.doi.org/10.3390/jintelligence11020031>
<https://m2.mtmt.hu/gui2/?mode=browse¶ms=publication;33606970>
- 2) (Q4, IF:0,12) **Csányi Tamás**; Tóthné Kálbli Katalin; Svraka Bernadett; Révész-Kiszela Kinga és Víg Julianna (2023). *Neuromítoszok az oktatásban – tények és törekvések*. MAGYAR PSZICHOLÓGIAI SZEMLE, 78 (2). pp. 273-289. ISSN 0025-0279
<https://doi.org/10.1556/0016.2023.00007>
<https://m2.mtmt.hu/gui2/?mode=browse¶ms=publication;33731081>
- 3) **Csányi Tamás**, Kálbli Katalin, Kaj Mónika, Svraka Bernadett, Víg Julianna (2023 vagy 2024). *Magyar pedagógusok és pedagógushallgatók idegtudományi műveltsége. Mennyire elterjedtek a neuromítoszok az oktatásban? ÚJ PEDAGÓGIAI SZEMLE* (review alatt álló kézirat)
<https://m2.mtmt.hu/gui2/?mode=browse¶ms=publication;34134502>
- 4) **Tóthné Kálbli Katalin**; Kaj Mónika; Víg Julianna; Svraka, Bernadett; Révész-Kiszela, Kinga és Csányi Tamás (2023 vagy 2024). *Mozgással, mozgásfejlődéssel és mozgásfejlesztéssel kapcsolatos tévhitek előfordulása pedagógusszakos hallgatók és végzett pedagógusok körében*. MAGYAR PEDAGÓGIA (review alatt álló kézirat)

Dissemination activities

We have presented our research results to higher education and public education stakeholders in several ways. We have concentrated on meeting publication expectations for the first half of the project timeline, and the implementation of dissemination events can only be successful after these publications. Dissemination events so far have been the following:

2021 – Presentation on the Hungarian Science Day (ELTE Faculty of Primary and Pre-school Education)
2023 – XIV. Taní-tani (online) Conference, Efficiency and coherence in pedagogy, special education, and teacher training. University of Miskolc (03.02.2023 ([LINK](#)))

2023 – „Researchers Night” Interactive presentation at the Hungarian University of Sports Science (29.19.2023 ([LINK](#)))

In addition to dissemination events, the presentation of the results of our research has been integrated into some university courses. ELTE and the Hungarian University of Sport Sciences are leading the way in this process.

Our research team maintains a website to keep our readers informed about our progress and publications. We also intensively disseminate our results and published papers to various professional groups in social media. As a result, our published papers now have thousands of readerships according to the Researchgate platform’s statistics.

Homepage of our Research Group: <https://www.tok.elte.hu/projektek>

Direct link: <https://sites.google.com/view/mta-elte-pszichomotoros/f%C5%91oldal>

Contributions of PhD students and in-service teachers

Our research team consisted of Ákos Horváth Dávid PhD student (ELTE NDI) in the first year and Bernadett Svraka (Simmelweis University) for the whole period.

Szilárd Szántó, who was to have been employed in pillar „B” of our original research plan, is unfortunately no longer involved in the program due to the termination of the pillar. Unfortunately, after the first year, cooperation became impossible.

We hope that despite our difficulties so far, the jury will give us the trust to continue!

Budapest, 09.30.2023

In the name of our Research group:

Sincerely,



Dr. habil. Tamás Csányi PhD

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