

Psychology and Educational Sciences (PE)
PSYC and EDWE

PE HONOURS PROGRAMME TOPIC LIST

Academic year 2024-2025

PEHonoursprogramma@vub.be
Cannaerts Lander – Coordinator PE honours programme

Inhoud

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1. Teaching And Learning International Survey - Prof. Dr. Jerich Faddar & Prof. Dr. Valérie Thomas

Research group and line of research:

BILD - Educational Effectiveness and Improvement

Title:

Teaching And Learning International Survey 2024 (OECD)

Promotor:

Prof. Dr. Jerich Faddar & Prof. Dr. Valérie Thomas

Supervisor:

Prof. Dr. Jerich Faddar & Prof. Dr. Valérie Thomas

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How many people can be selected for this internship?

2

Language needed to do this internship?

English & Dutch

Abstract (max 250 words):

Next to many other countries, Belgium participated with the Flemish community and French community, in the Teaching And Learning International Study (TALIS) which is organized by the OECD. It is the fourth consecutive cycle of TALIS in which Flanders takes part. This enables not only comparisons with other countries but also comparisons over time (trend analysis). A team of scholars of the VUB is responsible for the analysis of the data that were collected in TALIS2024 among more than 3000 teachers. The honours students will be responsible for developing a research report with an educational-pedagogical focus where Flemish teacher data are compared over time (trend analysis) and/or with another country. The precise focus can be decided upon between student and promoters. The student will have the opportunity to gain deep insight in how international comparative educational research is being conducted, develop competencies in analyzing large-scale data sets, and strengthen their academic reporting skills.

General timing described in the task section is:

- Fixed, ...
- Flexible -> in academic year 2025-2026
- Other: ...

The student *can* perform the following tasks:

T&I = Estimated timing and extra information

Note: the promotor, supervisor and student will plan which tasks the student *will* perform and when, taking into account that the internship will encompass a total of 45 to 50 full time days (i.e. 7 hours a day).

- Read and select relevant literature, T&I:
- Develop research question(s), T&I:
- Develop a research design, T&I:
- Write a research proposal, T&I:
- Develop and/or validate stimulus material/questionnaires, T&I:
- Recruit participants, T&I:
- Conduct a Pilot study, T&I:

- Conduct a study, T&I:
- Analyze data that you collected yourself, T&I:
- Analyze existing data, T&I:
- Interpret and present data, T&I:
- Write down findings in the form of a paper, T&I:
- Participate at a conference , T&I:
- Present the research at a conference, T&I:
- Other:, T&I:

Will the student have the chance to become a co-author if the work leads to a publication?

- No, because ...
- Yes, depending on focus and quality of deliverables.

The student will need the following training at an estimated time which will be provided by:

Training on the handling and techniques of analysis will be provided by promoters and researchers working on the TALIS (inter)national study center.

The following prior knowledge is needed:

Knowledge and skills in descriptive and inferential statistics is required. - Mastery of Dutch is an asset but not a strict requirement.

2. Educational change and innovation – Self-Regulated Learning and Learner-Centered Approaches - Prof. Dr. Koen Lombaerts

Research group and line of research:

Brussels Research Center for Innovation in Learning and Diversity (BILD) – Educational Change and Innovation

Title:

Educational change and innovation – Self-Regulated Learning and Learner-Centered Approaches

Promotor:

Prof. Dr. Koen Lombaerts

Supervisor:

The supervisor(s) will be appointed during final composition of the Honours Programme activities. Co-supervision will be provided by professors and postdoctoral researchers from the BILD group, according to the specific tasks and activities.

Contact by...

E-mail : Koen.lombaerts@vub.be or bild.research@vub.be

Office: B3.42

How many people can be selected for this internship?

3

Language needed to do this internship?

English

Abstract (max 250 words):

As part of the PE Honours Programme, selected candidate(s) will engage in the daily research activities of the Research Group BILD within the Department of Educational Sciences. In addition to general BILD activities and collaboration with BILD researchers, candidates will be involved in ongoing research projects involving international consortiums. Research topics include: self-regulated learning, technology-enhanced learning, mobile professional learning, hybrid learning spaces for active learning, citizenship education, up- and reskill of in-transition workers, unemployed or inactive adults, ongoing PhD research on related topics. Furthermore, candidates will also be involved in educational innovation projects linked to the research group and MSc. Educational Sciences programme. This may include further developing BILDLab for active, collaborative and hybrid learning and teaching; contributing to research activities related to educational quality assurance initiatives of MSc programmes.

General timing described in the task section is:

- Fixed, ...
- Flexible, ...
- Other: ...

The student *can* perform the following tasks:

T&I = Estimated timing and extra information

Note: the promotor, supervisor and student will plan which tasks the student *will* perform and when, taking into account that the internship will encompass a total of 45 to 50 full time days (i.e. 7 hours a day).

- Read and select relevant literature, T&I:
- Develop research question(s), T&I:
- Develop a research design, T&I:
- Write a research proposal, T&I:
- Develop and/or validate stimulus material/questionnaires, T&I:
- Recruit participants, T&I:
- Conduct a Pilot study, T&I:

- Conduct a study, T&I:
- Analyze data that you collected yourself, T&I:
- Analyze existing data, T&I:
- Interpret and present data, T&I:
- Write down findings in the form of a paper, T&I:
- Participate at a conference , T&I:
- Present the research at a conference, T&I:
- Other:, T&I:

Will the student have the chance to become a co-author if the work leads to a publication?

- No, because ...
- Yes, if significant contributions during writing process are given.

The student will need the following training at an estimated time which will be provided by:

No specific training needed but students will join Research Group workshops and team sessions. Possible extra training needs will be determined based on the final scope of core activities. However, strong academic performance in previous programmes and current enrollment in MA1 Educational Sciences or MA1 Onderwijskunde are considered a solid foundation.

The following prior knowledge is needed:

Students have preliminary insights into key educational subfields, such as those gained from taking the MA1 courses "Educational Change and Innovation", "Educational Design", and "Curriculum Development".

3. Insights into the Cognitive Mechanism of Rumination - Prof. Dr. Natacha Deroost

Research group and line of research:

Brain, Body, & Cognition (BBCO)

Title:

Insights into the Cognitive Mechanism of Rumination

Promotor:

Prof. Dr. Natacha Deroost

Supervisor:

Honglei Ou & Tomasz Lemmens

Contact by...

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How many people can be selected for this internship?

1

Language needed to do this internship?

English & Dutch

Abstract (max 250 words):

Imagine standing on a crowded street, lost in thought, as memories of past failures and successes swirl around you like autumn leaves in the wind.....Rumination can provide valuable insights from these reflections while simultaneously triggering negative emotions that potentially hinder social functioning. Although previous research has predominantly focused on the detrimental aspects of rumination, this study aims to provide a more balanced perspective. By employing cognitive tasks (e.g., the Think and No-Think task), manipulating the ruminative state, and conducting transcranial electrical stimulation (e.g., tDCS), we will investigate the cognitive functions associated with rumination, such as memory management capabilities. This research aims to deepen our understanding of rumination, highlighting both its potential benefits and drawbacks, ultimately contributing to a more nuanced view of this intriguing psychological phenomenon.

General timing described in the task section is:

- Fixed, ...
- Flexible, ...
- Other: ...

The student *can* perform the following tasks:

T&I = Estimated timing and extra information

Note: the promotor, supervisor and student will plan which tasks the student *will* perform and when, taking into account that the internship will encompass a total of 45 to 50 full time days (i.e. 7 hours a day).

- Read and select relevant literature, T&I:
- Develop research question(s), T&I:
- Develop a research design, T&I:
- Write a research proposal, T&I:
- Develop and/or validate stimulus material/questionnaires, T&I:
- Recruit participants, T&I:
- Conduct a Pilot study, T&I:

<input checked="" type="checkbox"/> Conduct a study, T&I:
<input checked="" type="checkbox"/> Analyze data that you collected yourself, T&I:
<input type="checkbox"/> Analyze existing data, T&I:
<input checked="" type="checkbox"/> Interpret and present data, T&I:
<input type="checkbox"/> Write down findings in the form of a paper, T&I:
<input type="checkbox"/> Participate at a conference , T&I:
<input type="checkbox"/> Present the research at a conference, T&I:
<input type="checkbox"/> Other:, T&I:

Will the student have the chance to become a co-author if the work leads to a publication?

<input type="checkbox"/> No, because ...
<input checked="" type="checkbox"/> Yes, if significant contributions during process are given.

The student will need the following training at an estimated time which will be provided by:

The series of the TNT task's tutorials
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The following prior knowledge is needed:

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4. Participatory Arts for Climate (Education) - Prof. dr. Elvira Crois & prof. dr. Free De Backer

Research group and line of research:

BILD, arts education

Title:

Participatory Arts for Climate (Education)

Promotor:

Prof. dr. Elvira Crois & prof. dr. Free De Backer

Supervisor:

Prof. dr. Elvira Crois

Contact by...

E-mail: free.de.backer@vub.be

How many people can be selected for this internship?

1

Language needed to do this internship?

Dutch, English

Abstract (max 250 words):

Recent cultural research on Earth's sustainability shows the limitations of information-based teaching strategies and call for a broadening of methods. A potential avenue is offered by participatory arts, which use a wide range of creative methods to engage audiences with climate, yet studies are limited to singular case studies that focus on learning outcomes while failing to give in-depth insight into the mechanisms of their methods. This postdoctoral research project responds to this need by conducting a systematic literature review, conducting interviews, and action research to better understand how and why these mechanisms work which will lead to a directory of methods with their corresponding mechanisms, values and addressed competences.

General timing described in the task section is:

- Fixed, ...
- Flexible, ...
- Other: ...

The student *can* perform the following tasks:

T&I = Estimated timing and extra information

Note: the promotor, supervisor and student will plan which tasks the student *will* perform and when, taking into account that the internship will encompass a total of 45 to 50 full time days (i.e. 7 hours a day).

- Read and select relevant literature, T&I:
- Develop research question(s), T&I:
- Develop a research design, T&I:
- Write a research proposal, T&I:
- Develop and/or validate stimulus material/questionnaires, T&I:
- Recruit participants, T&I:
- Conduct a Pilot study, T&I:
- Conduct a study, T&I:
- Analyze data that you collected yourself, T&I:
- Analyze existing data, T&I:

- Interpret and present data, T&I:
- Write down findings in the form of a paper, T&I:
- Participate at a conference , T&I:
- Present the research at a conference, T&I:
- Other: be part of ongoing Erasmus+ research projects Codename Seedling and Wave Makers, T&I:

Will the student have the chance to become a co-author if the work leads to a publication?

- No, because ...
- Yes, if they significantly contribute to the actual writing of an article.

The student will need the following training at an estimated time which will be provided by:

NA

The following prior knowledge is needed:

NA

5. Electrophysiological correlates in the clinical practice - Prof. Dr. Kris Baetens

Research group and line of research:

BBCO/BRUCC: Clinical biological psychology

Title:

Electrophysiological correlates in the clinical practice

Promotor:

Prof. Dr. Kris Baetens

Supervisor:

Helen Tobbac & Lander Cannaearts

Contact by...

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How many people can be selected for this internship?

1

Language needed to do this internship?

Dutch & English

Abstract (max 250 words):

This internship will span over two different project. The doctoral project of Helen Tobback and the doctoral project of Lander Cannaearts.

We'll investigate dispositional (self-report and EEG) characteristics, objective behavior performance on inhibition tasks and the EEG correlates thereof in healthy controls and diverse clinical groups, with a focus on addiction problems. We also apply non-invasive brain stimulation and investigate its impact on these metrics, as well as clinical outcomes. The honors student can contribute as a research intern, with a focus on electrophysiological data collection, or, alternatively, develop extensions of ongoing studies on a semi-autonomous basis.

We'll also investigate neural biomarkers on a more theoretical level, possibly working towards a systematic review of the "newer" EEG metrics to further the knowledge of biomarking psychopatholgy. In addition to this we'll delve into the world of large data analysis and interpretation.

General timing described in the task section is:

- Fixed, ...
- Flexible,
- Other: ...

The student *can* perform the following tasks:

T&I = Estimated timing and extra information

Note: the promotor, supervisor and student will plan which tasks the student *will* perform and when, taking into account that the internship will encompass a total of 45 to 50 full time days (i.e. 7 hours a day).

- Read and select relevant literature, T&I:
- Develop research question(s), T&I:
- Develop a research design, T&I:
- Write a research proposal, T&I:
- Develop and/or validate stimulus material/questionnaires, T&I:

<input checked="" type="checkbox"/> Recruit participants, T&I:
<input type="checkbox"/> Conduct a Pilot study, T&I:
<input checked="" type="checkbox"/> Conduct a study, T&I: EEG / tES or combined experiments
<input checked="" type="checkbox"/> Analyze data that you collected yourself, T&I:
<input checked="" type="checkbox"/> Analyze existing data, T&I: depending on interest of honours student
<input checked="" type="checkbox"/> Interpret and present data, T&I:
<input checked="" type="checkbox"/> Write down findings in the form of a paper, T&I:
<input checked="" type="checkbox"/> Participate at a conference , T&I:
<input type="checkbox"/> Present the research at a conference, T&I:
<input type="checkbox"/> Other:, T&I:

Will the student have the chance to become a co-author if the work leads to a publication?

<input type="checkbox"/> No, because ...
<input checked="" type="checkbox"/> Yes, if student makes significant contributions

The student will need the following training at an estimated time which will be provided by:

<input checked="" type="checkbox"/> EEG and/or tES data collection
<input checked="" type="checkbox"/> Interpreting and analyzing data (depending on project)
<input checked="" type="checkbox"/> Presentation skills

The following prior knowledge is needed:

A sound basis in biological psychology and research ethics.

6. Ageing in place as a matter of rights - Prof. Dr. Liesbeth De Donder

Research group and line of research:

Society and Ageing Research Lab (SAR-LAB)

Title:

Ageing in place as a matter of rights

Promotor:

Prof. Dr. Liesbeth De Donder

Supervisor:

Prof. Dr. Liesbeth De Donder, and Prof. Dr. Kieran Walsh (HOMeAGE project)

Contact by...

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How many people can be selected for this internship?

1

Language needed to do this internship?

English

Abstract (max 250 words):

This research will conduct focus groups with social activists from Europe and different regions of the world to explore what human rights principles are relevant for ageing in place, from the perspective of actors involved in advocacy for the rights of older persons in diverse contexts.

Nine small online focus groups (3-5 participants) will be organized with social activists advocating for older persons' rights, covering Europe, Northern Africa, Sub-Saharan Africa, South America, North America, Central Asia, South Asia, East Asia, and Oceania. One focus group will include activists from indigenous communities. Activists will be selected in consultation with the Global Alliance for the Rights of Older People (GAROP), with over 400 members worldwide. In Europe, selection will be in partnership with the AGE Platform.

Key information and preliminary questions will be sent before sessions to facilitate thoughtful discussions. A pilot focus group will refine the approach. Focus groups will be transcribed verbatim and analyzed through thematic analysis using MaxQDA.

General timing described in the task section is:

- Fixed, ...
- Flexible, ...
- Other: ...

The student *can* perform the following tasks:

T&I = Estimated timing and extra information

Note: the promotor, supervisor and student will plan which tasks the student *will* perform and when, taking into account that the internship will encompass a total of 45 to 50 full time days (i.e. 7 hours a day).

- Read and select relevant literature, T&I:
- Develop research question(s), T&I:
- Develop a research design, T&I:
- Write a research proposal, T&I:
- Develop and/or validate stimulus material/questionnaires, T&I: 3
- Recruit participants, T&I: 20

- Conduct a Pilot study, T&I: 2
- Conduct a study, T&I: 15
- Analyze data that you collected yourself, T&I: 10
- Analyze existing data, T&I:
- Interpret and present data, T&I:
- Write down findings in the form of a paper, T&I:
- Participate at a conference , T&I:
- Present the research at a conference, T&I:

Will the student have the chance to become a co-author if the work leads to a publication?

- No, because ...
- Yes, but unsure for now. It will depend on the tasks finally performed.

The student will need the following training at an estimated time which will be provided by:

N/A

The following prior knowledge is needed:

Planning, organizing and good time management skills; basic notions of qualitative research with focus groups; good communication skills in English, written and orally; highly valuable if the student handles MaxQDA or other qualitative research analytical tools.