Experiential Learning in Psychological Research (PS291)

Research Internship Handbook

2022-2023

Department of Psychology



General Introduction and Background

Welcome to Year 3 of the BSc degree; this year will an exciting one whereby you will have the opportunity to explore and observe psychology conducted in a more applied fashion. As part of the third year, you will be required to complete two modules – PS291 and PS293 or PS292. The first semester consists of a Research Internship (PS291) and will be conducted within the Department of Psychology. This handbook aims to provide you with information regarding the PS291 research Internship module, so please keep it safe as you will need to refer to it during the year. PS291 is a compulsory module and is worth 30 credits, i.e. half of the credits available for third year. In the second semester, students will have the choice of spending some time abroad (on Erasmus - PS292; note that this may depend on Covid-19 guidelines) or on work placement (PS293) – see appropriate handbooks for details regarding these modules.

Research is integral to psychology and the scientific endeavour that lies at the heart of the discipline. Formulating hypotheses, articulating research questions, designing studies and collecting and analysing data (through the use of both quantitative and qualitative methods), are all critical elements of the scientific and research method. Such methods are taught formally and informally throughout the undergraduate degree. For example, formal lectures provide indepth knowledge of a particular area while lab-based classes provide the necessary skills to analyse data using both quantitative and qualitative methods. Furthermore, the aim of practical classes is to put this knowledge into practice. However, it is only when students become actively involved in, or are exposed to, a research environment that they truly appreciate the value of research and its central role in psychology. By working within a research context and by helping to carry out research, many of the psychological concepts and principles taught in class really begin to make sense. Furthermore, experience of working within a research context can help to prepare students to conduct their own independent piece of research in final year and might inspire students to consider postgraduate research options, or future careers as psychological scientist/practitioners.

Maynooth University's Department of Psychology has a vibrant and thriving community of research active staff and students. Research is seldom a solo endeavour and often requires a team of researchers and support staff to carry out a programme of work. Thus, we have a large pool of postgraduate students as well as other research staff, including Research Assistants and

Postdoctoral Fellows who have their own dedicated research spaces. Our postgraduate students and research staff are vital to the day-to-day 'life' of the department, providing invaluable expertise, and supporting many departmental activities.

Over the last decade, our staff has attracted several million euros worth of research funding from national and international sources. They have published hundreds of scientific research papers in international peer-reviewed journals that have had major impact on their fields, as well as contributing many policy papers and reports that directly influence practice across many domains. In addition, they have authored and contributed to many other publications and research outputs aimed at a wide range of audiences across a number of domains. These include books, book chapters, commissioned reports, policy briefs and other articles of professional interest. Furthermore, our departmental researchers and postgraduate students are involved in a range of high quality international research collaborations with researchers across the globe, as well as, playing key roles in the various research institutes within the university.

The research interests of the staff reflect the diverse and interdisciplinary nature of psychology. To view the range of staff research interests, please go to the departmental website https://www.maynoothuniversity.ie/psychology/our-people (and other related sites including https://www.maynoothuniversity.ie/all-institute and www.cmhcr.eu). In general, staff research interests fall into four main thematic areas including:

- Mental Health, Community & Positive Psychology
- Neuroscience, Behaviour & Cognitive Science
- Organisations, Policy & Systems Science
- Rehabilitation, Disability and Health Psychology

The Department of Psychology has state-of-the-art research facilities and is well equipped to carry out high quality research. It houses a fully equipped electroencephalography (EEG) research facility, which is home to a 128 channel ERP recorder, a behavioural neuroscience laboratory, a computer laboratory, a research laboratory with specifically designed research carrels, a psycho-physiology laboratory equipped with electrocardiography (ECG), galvanic skin response (GSR), respiration polygraph and eye tracking devices. In addition, the department has a full test library of psychological tests and questionnaires. Our research is also conducted in applied settings and departmental staff have strong and well-established links with community partners, voluntary groups, civil society and non-governmental organisations.

In addition, the department has many close links with the major Dublin hospitals, thereby allowing access to clinical populations.

Module Overview

Students will have an opportunity to be placed within one of the four departmental research themes to gain experience and to directing link research, knowledge and practice. Activities may include, but are not limited to, training in an advanced techniques, gaining access to specialised equipment/resources, undertaking desk-based pieces of research, and collecting data as part of working 'in the field'. Such opportunities will be arranged by the student's supervisor. This immersion in a research environment is designed to enable students to think about research in a holistic and meaningful fashion. For example, what are the roles of the various members of the research team? Do they work as a group or individually? How are research projects designed and conducted? How are sensitive and ethical issues managed? What is involved in conducting a detailed review of the literature? What is involved in drafting an article for publication or preparing and presenting a conference paper? How do researchers manage their interactions with stakeholders?

Module Content:

- Experience in the conduct of psychological research as part of ongoing projects;
- Working as a team member in psychological research;
- Developing professional and interpersonal skills in the research setting;
- Self-reflection on personal development and maintaining a professional development portfolio.

Learning Outcomes:

On successful completion of this module, students should be able to:

 Critically evaluate the role and conduct of research in developing new psychological knowledge;

- Appreciate the connection between research in psychology and the ultimate application of that research;
- Reflect on the roles of individual and team work in research in psychology;
- Demonstrate self-reflection in domains of professional and interpersonal skills required for effective work in psychological research;
- Produce both written and oral summations of the experience of research in psychology.

Preparation

All students have completed the PS261 Critical Skills in Psychology module in second year. This has provided students with preparation in terms of how to work as part of a team, CV preparation and developing communication skills. However, there are a number of important Maynooth University (MU) policies and documents that specifically pertain to conducting research. Each student should acquaint themselves with these policies and requirements before starting the Research Internship module. These include, but are not limited to, the university research integrity policy, ethics and plagiarism. All of which can be found and downloaded from the following website https://www.maynoothuniversity.ie/research. As the psychology programmes at MU are accredited by the Psychological Society of Ireland, it is also important to be aware of the standards and guidelines set by the profession. These guidelines can be found via: (https://www.psychologicalsociety.ie). Where appropriate students may be required to sign off on the Departmental Health and Safety document (please refer to your Research Internship supervisor for information).

Garda Vetting and Child Protection Policy

As part of the Research Internship, some students may be required to work with, or be in contact with, vulnerable groups (e.g. children and young people under 18 or other potentially vulnerable groups) and, as such, it is essential that students undergo Garda Vetting **prior** to the Internship in line with college procedures (https://www.maynoothuniversity.ie/study-maynooth/how-apply/application-policies/garda-vetting-policy). In addition, students working in organisations that provide services to children will be required to familiarise themselves with the University's Child Protection Policy and Procedures (see https://www.maynoothuniversity.ie/study-maynooth/how-apply/application-policies/garda-vetting-policy). In addition, students working in organisations that provide services to children will be required to familiarise themselves with

agreement that they will abide by these polices. Students should also familiarise themselves with the current Covid-19 health guidelines, which can be obtained from the Maynooth University homepage.

Selecting a research theme of interest

Some tasks are generic across research areas such as: communicating and working in cooperation with other team members; attending research group meetings; developing an awareness of health and safety issues pertaining to research; developing an awareness of the ethical, professional and research integrity; and conducting literature searches and reviews. The specific domain of application will vary according to the research theme (although in practise there are many areas of overlap and synergy). Students should carefully consider their personal theme preferences as well as exploring the research interests of individual staff members (https://www.maynoothuniversity.ie/psychology/our-research) before nominating their preferred areas for Research Internship.

Mental Health, Community & Positive Psychology

Academic staff members associated with this research theme include Dr Sadhbh Byrne, Dr Michael Daly, Dr Philip Hyland, Professor Sinéad McGilloway, Dr Joanna Mchugh Power, Dr Tadhg Macintyre and Dr Brenda O'Connell. Within this research theme, students may take part in data collection in the community; become familiar with the administration and scoring of psychometric tests; develop a practical understanding of ethical and other issues when working with potentially vulnerable groups in the community; help with the management and preparation of both quantitative and qualitative data; learn about liaising with community-based partners in 'real world' research; get involved in systematic reviews (and also standard literature reviews); help with the organisation of departmental research-related events; and use specialised equipment such as heart and blood pressure monitors.

Neuroscience, Behaviour & Cognitive Science

Staff members associated with this theme include Professor Sean Commins, Professor Andrew Coogan, Dr Unai Diaz-Orueta, Professor Fiona Lyddy, Dr Dermot Lynott, Dr Tadhg

Macintyre, Dr Peter Murphy, Dr Bryan Roche and Dr Richard Roche. Activities can include work on literature reviews, data collection and analysis, screening and piloting tests, and using specialised equipment, such as, electroencephalography (EEG), transcranial magnetic stimulation (TMS), virtual reality (VR), galvanic skin response (GSR) and computer-controlled experiment software.

Organisations, Policy & Systems Science

Staff members associated with this theme include Dr Michael Cooke, Professor Mac MacLachlan, Dr Joanne McVeigh and Dr Katriona O'Sullivan. Students might participate in professional report writing, qualitative data analysis and conducting literature reviews.

Rehabilitation, Disability and Health Psychology

Staff members within this research theme include Professor Deirdre Desmond, Professor Mac MacLachlan, Dr Rebecca Maguire, Dr Joanna Mchugh Power, Dr Joanne McVeigh, Dr Brenda O'Connell and Dr Katriona O'Sullivan. Students may be required to contribute to literature reviews of research topics relating to health, chronic illness and/or disability; become familiar with administration, scoring and interpretation of psychometric measures commonly employed in health research; and develop a practical understanding of ethical issues when working with patients and other potentially vulnerable groups. There may also be possibilities for some internships to contribute to Health Service Executive (HSE) disability service development initiatives.

Initial steps

At the end of second year, students were requested to view staff presentations on their research areas, to review the general research themes active within the department and to complete a Thematic Preference poll. Students were required to rank each theme in order of preference and were then randomly allocated to a supervisor within the chosen theme. It was suggested that following allocation, students and supervisors should meet to articulate the aims and goals, work schedule, and expected outcomes for the Internship.

Timetable/scheduling

PS291 is scheduled to take place over a 12 week period in Semester 1. Table 1 provides an indicative timetable of events over this period.

 Table 1: Schedule of events during Semester 1

| | Week start | Activity | |
|----------|------------------------------|--|--|
| Week 1 | Sept 19th | Meet module co-ordinator. | |
| Week 1/2 | Sept 19 th /26th | Initial meeting with supervisor to outline aims/goals of Internship. | |
| | | Introduction to supervisor's research team (as appropriate). | |
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| Week 3 | Oct 3rd | Research seminar Fridays 1-2pm (7th) | |
| | | | |
| Week 4 | Oct 10th | Research seminar Fridays 1-2pm (14 th) | |
| Week 5 | Oct 17th | Research seminar Fridays 1-2pm (21st) | |
| Week 6 | Oct 24th | One-page progress report to be submitted to supervisor. | |
| | | Teas/Coffee (Oct 28 th) | |
| | | | |
| | | Research seminar Fridays 1-2pm (28 th) | |
| | Oct 31st-4 th Nov | Study Week | |
| Week 7 | Nov 7th | Research seminar Fridays 1-2pm (11 th) | |
| Week 8 | Nov 14th | Research seminar Fridays 1-2pm (18 th) | |
| Week 9 | Nov 21st | Research seminar Fridays 1-2pm (25 th) | |
| Week 10 | Nov 28th | | |
| Week 11 | Dec 5th | | |
| Week 12 | Dec 12th | Presentation of Research Experience to class and staff | |
| | | | |
| Jan | Fri 13th | Submission of Research Experience portfolio + Diary | |

Maynooth University library offers a variety of courses and workshops throughout the year that are specifically associated with research. Students should take the opportunity to attend some of these courses. See the library website for details (https://www.maynoothuniversity.ie/library).

Assessment and Deadlines

While each individual assignment will be assessed and feedback to students will be provided, this is a competency-based module - students will simply receive either a pass or fail grade on completion. In order to successfully complete this module, students must submit/prepare the following components: (1) progress report; (2) research diary; (3) research experience portfolio; and (4) an oral presentation. Further information on each of these is provided below.

1. Progress Report

Students will be required to complete a short **progress report** (Appendix B) to be submitted/emailed to their supervisor before **Friday 28th October 2022**. This **one** page document should outline: (1) the objectives and key outputs/deliverables from the Research Internship; (2) progress toward achieving these objectives/deliverables; and (3) any changes to the research plan, including justification, critical reflection and associated contingency plans.

2. Research Diary

Students must complete a **weekly research diary** which clearly documents their activities, experience and skill development over the course of the Internship. The complete diary will be submitted alongside the Research Experience portfolio at the end of the Internship (<u>as an Appendix</u>). A template and indicative guide are included as Appendix C; however, it is not intended that this template is prescriptive, students can develop a structure to suit their activities and experiences.

3. Research Experience Portfolio

At the end of the Internship, students must submit a **Research Experience Portfolio** in which they clearly articulate how psychological principles have been applied within their research Internship. This report should also document the research that has been undertaken and how it relates to the overall research goals of the team and the wider literature. There are **three** components to the report:

• Description of project(s).

This section should describe the work that has been completed (word limit = 4,000 words. Please include (as appropriate):

Background to the research area/topic. Provide details on the project and discuss how the current research fits within the wider psychological literature.

General aims of the research. What does the research hope to achieve? Reflect on the nature of the research, its importance and the possible impact on the wider society.

What methods are used generally to advance the research goals of the group? Describe the various methodologies used by the research group and reflect on why such methods are appropriate. For example, does the group conduct interviews with a particular sample? Are surveys used? Are specialised pieces of equipment/technology required? What types of methodology and methods are employed (e.g. qualitative, quantitative, mixed methods)?

Personal contribution: Describe **what you have done** and reflect on how this work has contributed to the overall aims of the research. Contextualise your work within the psychological literature more generally.

• Self-reflection.

This **1,000 word** section should describe your research experience: what you have learned during your Internship; and how the Internship has influenced your personal and professional development. The section should be based on reflection on your weekly diary. If appropriate, please address questions such as:

What did you learn about research in general?

What did you learn about working as part of a wider team?

What skills (technical, presentational, communication, inter-personal, etc.) did you develop during the Internship?

What psychological insights have you gained through your Research Internship?

How might this research experience influence how you plan and conduct your Final Year Project next year?

What areas have you identified for development?

• Research Abstract

Starting in October, the Department of Psychology will host a weekly series of Research Seminars. During these seminars you will hear from expert external speakers on a wide range of topics in psychology and psychological science. These seminars will reflect the current state-of-the-art in any given speciality, and as such are an important opportunity to become familiar with highly contemporary research and topics in psychology. These are scheduled to take place on **Fridays 1-2pm in the departmental teaching room.** (If online, I will provide you with access.)

As part of the Research Experience Portfolio, you will be required to provide a summary/abstract of **one** of these research seminars – a seminar that you particularly enjoyed or found interesting. See Appendix D for a template for this abstract.

The deadline for the Research Experience portfolio is 5pm Friday 13th Jan 2023.

Assignments should be uploaded to the dedicated Turnitin Link on the PS291 moodle page.

4. Presentation

Presentations will be held during towards the end of Semester 1 (\sim week 12) and will be organised through the department. All students are required to attend and present their work. Each presentation will be of \sim 10 minutes' duration. Presentations can be structured as follows:

8 minutes for description of the background and context of the research and personal contribution to the research programme; 2 minutes critical reflection on personal learning; and time for audience questions.

Final thoughts

Covid-19 pandemic may still pose a threat this year and we have to remain flexible, should restrictions be brought in. This may mean that face-to-face research activities could be curtailed. In addition, some supervision may take place online rather than face-to-face – this will pose further challenges both for you and your supervisor. Please keep in touch with your supervisor throughout the semester on a regular basis. Despite this, we hope that you will gain a good insight into the type of research work that is carried out in the department and enjoy the experience with working closely with the staff and research teams.

We hope that you find this document helpful and informative. Any suggestions you might have for its improvement would be most welcome. Please forward these to Prof Seán Commins in writing. If you so wish, you may submit your comments anonymously. Once again, the staff wish you the very best for your studies this year and we hope that you enjoy your time with us.

APPENDIX A



PS291: Thematic Preference Form

Student Details

| Name | |
|----------------|--|
| Student Number | |
| | |

Project Choice

1: Having read the theme descriptions and staff profiles, please rank each in order of your preference (where 1 = most preferred and 4 = least preferred):

| Departmental Thematic Areas | Rank |
|--|------|
| | |
| Mental Health, Community & Positive Psychology | |
| | |
| Neuroscience, Behaviour & Cognitive Science | |
| | |
| Organisations, Policy & Systems Science | |
| | |
| Rehabilitation, Disability and Health Psychology | |

APPENDIX B



Research Internship (PS291) Progress Report

| Name: | | |
|-------------------------------------|-----------------------|--|
| Student Number: | | |
| | | |
| Briefly describe and reflect on you | r experience to date. | |
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APPENDIX C

KEEPING A RESEARCH DIARY

Why keep a diary?

- A diary is a useful record of events that may have happened over the course of a few months our memories often fail us!
- It is an *ongoing* record of research and activities.
- It is a useful record of thoughts and feelings at the time; you can see how these change across time and circumstances.
- It also charts how your research skills develop across time, it's a record of skills that you have acquired and techniques that you have learnt.
- At the end, you will be able to look back at your diary as a reference, allowing you to reflect on the overall experience.

How to keep a diary

- You can use the template below or a version of this. But, make sure that your diary is manageable and that it is easily accessible (saved onto your computer, in a folder etc).
- Try and make notes on a regular basis (e.g. daily), so that you can provide an accurate account in your weekly diary.
- Remember, your weekly activity will vary so don't worry if you have a lot to write in some weeks and relatively little at other times.

Ethical considerations

Please be aware that a reflective research diary may be considered as a 'data source' and therefore subjected to the Data Protection Act. Avoid using names and personal details in the diary, whereby someone could be identified. Please show respect at all times and remember to be professional in your attitude and writing.

Possible template

| Date: | | Examples |
|--|--|--|
| What have you done this week? | Describe the activity, the event, new experience, people that you have met, papers that you have read. (This could be as detailed as you wish. Add notes, materials, ideas, observations, questions etc, as appropriate.) | On Tuesday, I had to give a presentation on a journal article XXX to 3 members of the cognitive research group. |
| What skills will /have I acquire(d)? | Describe the skills that you have developed. | Presentational, self- management, time- management, confidence, analytical etc. |
| Evaluation and analysis | What was good, useful, not so good about the activity/experience? What did you learn in more specific terms? | I had never done a presentation before, so it was useful to know how to read an article properly, take out the key pieces of information, learn to use PowerPoint and present the findings. I know that the font size should be at least XXX, to have less text and more images |
| Feelings/Reaction/Personal reflections | How did you feel about the activity, what was your reaction? | My timing was slightly off. I was really nervous before hand and was afraid that the slides wouldn't load, that I didn't explain things clearly and that I wouldn't be able to answer the questions. Afterwards, however, I was happy that I did it |
| Planned actions to follow up. | Any ideas, suggestions, questions that you need to follow-up. Strategy for following this up? | The question from one of the group was really interesting and very relevant I need to check I need to practice more to keep the presentation on |

| | time and focused. Next |
|--|------------------------|
| | time |

Appendix D

Abstract

| OBJECTIVE (<30 words): |
|---|
| BACKGROUND (<100 words): |
| RESEARCH DESIGN AND METHODS (<100 words): |
| RESULTS (<100 words): |
| CONCLUSIONS (<20 words): |

Research Portfolio template

Title page

Include your name, supervisor's name, BSc Research Internship.

- **1. Description of research, (4000 words)** feel free to use subheadings.
- 1.1: Research being done by the group.
- 1.2: How does the research fit with the general literature and wider psychology field.
- 1.3: Your contribution to the research.
- 1.4: Research knowledge and skills gained.
 - 2. Self-reflection, (1000 words)

References

If you have cited work by the group or others you can include these in a reference section. When doing so, please use APA formatting.

Appendix

Research diary Seminar abstract