

UEA Doctorate in Clinical Psychology

# RESEARCH 1 (RES 1)

Module Leads: Dr. Fergus Gracey and Dr. Laura Pass  
2019 Cohort

**Module: RESEARCH 1**  
**Module Leads: Dr. Fergus Gracey , Dr. Laura Pass**  
**Aims and Learning Objectives of Module**

The ClinPsyD Programme aims to develop and improve trainees' skills with regard to applied clinical research work. To these ends, the Programme provides a variety of formal teaching and practical support. It should be borne in mind that the ClinPsyD is a post-graduate doctoral level programme of study and trainees are expected to have a sound basic grounding in both scientific research methods and statistical analysis from their undergraduate studies. Therefore, the emphasis in the teaching provided is on the application of these to clinical problems. We aim to equip Trainees with the tools to become sophisticated applied researchers. We do not expect to teach basics in research methodologies or in statistical analyses. Additional support is provided through online materials, PGR PPD training opportunities and access to specialist supervisors.

The Research module is designed to take Trainees through all aspects of both the process of conducting a doctoral level research project, from planning, design of protocols, methodologies, analysis and writing-up as well as providing Trainees with an understanding of both qualitative and quantitative applied research methods and to put these approaches in the context of clinical research. The Research Methods module also aims to provide Trainees with the skills to conduct service evaluation and clinical audit.

**Where this module fits in:**



The research module equips Trainees with the skills to: plan and conduct independent research, including identifying research questions; demonstrating an understanding of ethical issues; choosing appropriate research methods and analysis (both quantitative and qualitative); reporting outcomes and identifying appropriate pathways for dissemination.

Research teaching sessions are developmentally sequenced and synchronised with relevant Programme assignments (open-book statistics test, thesis proposal, service related project, systematic review, and thesis). The research teaching is supported by timetabled sessions for consultation with course staff to develop research plans, and research supervision sessions with research supervisors.

Teaching on the Research module is primarily delivered in the first year of the Programme and extends across all 3 years. It has four main aims: To facilitate the development of competencies in planning, conducting, and disseminating clinical research

1. To facilitate critical interpretation of varieties of data, be that quantitative or qualitative; individual patient or group; in service or research contexts
2. To provide support for the development and conduct of the thesis research project
3. To provide support for the development and conduct of the systematic review
4. To provide support for the development and conduct of the service related project

**The teaching on this module will contribute to trainees learning the following standards of proficiency in line with the HCPC (2015) standards:**

1. Be able to practice safely and effectively within their scope of practice
2. Be able to practice within the legal and ethical boundaries of their profession
3. Be able to maintain fitness to practice
4. Be able to practice as an autonomous professional, exercising their own professional judgement
6. Be able to practice in a non-discriminatory manner
7. Understand the importance of and be able to maintain confidentiality
8. Be able to communicate effectively
9. Be able to work appropriately with others
10. Be able to maintain records appropriately
11. Be able to reflect on and review practice
12. Be able to assure the quality of their practice
13. Understand the key concepts of the knowledge base relevant to their profession
14. Be able to draw on appropriate knowledge and skills to inform practice
15. Understand the need to establish and maintain a safe practice environment

**BPS (2015) competencies covered in the teaching on this Module:**

1. Generalizable meta-competencies
2. Psychological Assessment
3. Psychological Formulation
5. Evaluation
6. Research
7. Personal and professional skills and values
8. Communication and teaching
9. Organisational and systemic influence and leadership

# RES1

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
1.5 hours	Introduction to Research on the UEA ClinPsyD Programme	<p><b><u>Process</u></b></p> <p>Trainees will develop an understanding of the research elements of the Programme through:</p> <ul style="list-style-type: none"> <li>• Increased understanding of the research assignments, including the thesis portfolio</li> <li>• Increased understanding of the expectations of the ClinPsyD Programme</li> <li>• Increased understanding of the timeline for the research assignments</li> <li>• Increased understanding of the teaching and support available</li> </ul>
1.5 hours	Introduction to Library Searching	<p><b><u>Methods</u></b></p> <ul style="list-style-type: none"> <li>• Trainees will gain an increased understanding of the library facilities and the support available.</li> <li>• Trainees will be introduced to the library system and how to search for learning materials</li> </ul>
3 hours	Introduction to NHS Research	<p><b><u>Methods</u></b></p> <p>Topics:</p> <ul style="list-style-type: none"> <li>• Milestones in the history of NHS research</li> <li>• The importance of research for NHS clinical psychologists</li> <li>• Some hurdles in conducting NHS research</li> <li>• Guidelines for clinical research</li> </ul> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• To enable trainees to appreciate the importance of research in NHS clinical psychology practice</li> <li>• To encourage trainees to adopt a critical, sceptical and cautious approach when examining clinical research literature</li> <li>• To familiarise trainees with recognised guidelines for the conduct of clinical research</li> </ul>
1.5 hours	Introduction to APA and academic writing style	<p><b><u>Methods</u></b></p> <ul style="list-style-type: none"> <li>• Trainees will develop an understanding of the importance and role of APA formatting when writing academic pieces of work.</li> </ul>

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
1.5 hours	Project management and managing multiple deadlines	<p><b>Process</b></p> <ul style="list-style-type: none"> <li>To introduce Trainees to project management techniques (e.g. Gantt charts) to assist with managing multiple deadlines</li> </ul>
3 hours	Describing Data/ Introduction to Statistical Analysis Part 1	<p><b>Methods</b></p> <p>Topics:</p> <ul style="list-style-type: none"> <li>Descriptive statistics</li> <li>Rationale behind inferential statistics, including sampling methods and standard errors</li> <li>Basic statistical tests</li> </ul> <p>Objectives:</p> <ul style="list-style-type: none"> <li>To re-introduce trainees to the logic of inferential statistical analysis</li> <li>To re-introduce trainees to important statistical concepts, including confidence intervals, multiple testing, effect sizes, and alpha levels using t tests as an example</li> <li>To re-introduce trainees to other basic tests such as correlation, chi squared and nonparametric tests</li> </ul>
3 hours	Introduction to the Service Related Project and Clinical Audit	<p><b>Process and Method</b></p> <ul style="list-style-type: none"> <li>To understand the purpose and rationale of the Service Related Project (SRP) in line with HCPC Standards of Proficiency, BPS Standards, the NHS Constitution and UEA requirements</li> <li>To understand the SRP governance and assignment requirements, process and timeline</li> <li>To understand the differences between research, service evaluation and clinical audit</li> <li>To understand the roles and responsibilities of the Trainee, UEA SRP Supervisor, and Clinical SRP Supervisor</li> <li>To understand how to apply research competencies, develop and disseminate a project idea and the study findings</li> <li>To learn about the BPS Leadership Framework and understand how research competencies can be applied in leadership roles</li> <li>To understand how a clinical audit project can be carried out as a Service Related Project (SRP)</li> <li>To understand the differences between research, service evaluation and clinical audit</li> <li>To understand how to apply research competencies to clinical audit</li> </ul>

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
		<ul style="list-style-type: none"> <li>• To understand the clinical audit cycle</li> <li>• To understand clinical audit within the context of NHS Clinical Governance, the NHS Constitution (2013) and the NHS Health Care Quality Improvement Partnership</li> <li>• To learn about the BPS Leadership Framework (2010) and understand how research competencies can be applied in leadership roles</li> </ul>
3 hours	Critical Appraisal, Systematic Reviews and Evidence-Based Practice	<p><b>Methods</b></p> <ul style="list-style-type: none"> <li>• To introduce Trainees to the importance of critical appraisal skills to inform both research and clinical practice</li> <li>• To introduce Trainees to the concept of systematic reviews and how these inform evidence-based practice</li> </ul>
3 hours	Describing Data/ Introduction to Statistical Analysis Part 2	<p><b>Methods</b></p> <p>Topics:</p> <ul style="list-style-type: none"> <li>• Other statistical methods including regression, ANOVA, and selected multivariate techniques</li> </ul> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• To enable trainees to know when to select and how to interpret the above tests</li> <li>• To enable trainees to select research designs with statistical analysis in mind</li> </ul>
3 hours	Power Analysis and Small N designs	<p><b>Methods</b></p> <ul style="list-style-type: none"> <li>• To appreciate the need for designs that focus on individual change</li> <li>• To be aware of the advantages and disadvantages of single case designs</li> <li>• To be able to devise and interpret the family of AB designs</li> <li>• To be aware of the limitations of AB designs</li> <li>• To be able to devise and interpret the family of multiple baseline (MBL) designs</li> <li>• To be aware of the limitations of MBL designs</li> <li>• To be able to devise and interpret the family of simultaneous treatment designs</li> <li>• To be aware of the limitations of simultaneous treatment designs</li> <li>• To have knowledge of other less common single case designs (e.g. changing criterion designs)</li> </ul>

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
		<ul style="list-style-type: none"> <li>• To be able to use visual inspection in interpreting single case data</li> <li>• To be aware of the limitations of visual inspection</li> <li>• To use appropriate statistical analysis of single case data</li> <li>• To calculate appropriate effect sizes for single case data</li> </ul>
3 hours	Statistics Revision for Open Book Statistics Test in January	<p><b>Methods</b></p> <ul style="list-style-type: none"> <li>• Revision on basic statistics and research design in preparation for the Open Book Statistics Test.</li> </ul>
3 hours	Introduction to Qualitative Research	<p><b>Methods</b></p> <ul style="list-style-type: none"> <li>• To become familiar with the concepts of epistemology and ontology and how different ways of thinking about the world/ knowledge impact on our understanding of how knowledge is produced and as a result impact on the development of a research project.</li> <li>• To appreciate some of the guiding principles and practices of qualitative enquiry.</li> <li>• To think about the potential value of qualitative research to address issues of concern to people/society.</li> <li>• To consider why qualitative research may fit well with the research agendas and research limitations inherent in research with clinical populations.</li> </ul>
2 hours	Open Book Statistics Test (Summative Assignment)	<p><b>Summative Assignment</b></p> <ul style="list-style-type: none"> <li>• To assess Trainees' level of knowledge of statistical concepts and procedures</li> <li>• To highlight areas of weakness common across the Trainees in their knowledge and understanding of statistics</li> <li>• To identify Trainees who may require additional support in understanding statistical concepts and procedures.</li> <li>• To provide feedback to Trainees about any areas of weakness in their knowledge and understanding of statistics</li> <li>• To demonstrate the ability to carry out statistical calculations</li> <li>• To demonstrate the ability to use statistical tables</li> </ul>

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
3 hours	Research Fair	<p><b><u>Process</u></b></p> <ul style="list-style-type: none"> <li>• To orient Trainees to the thesis project timeline</li> <li>• To inform Trainees about the thesis projects staff can supervise</li> <li>• To inform development of the thesis project</li> <li>• To provide Trainees with the experience of attending a conference-style poster presentation event</li> </ul>
3 hours	Meeting with staff following Research Fair to discuss thesis projects	<p><b><u>Process</u></b></p> <ul style="list-style-type: none"> <li>• To inform Trainees about the thesis projects staff can supervise</li> <li>• To further inform development of the thesis project</li> </ul>
3 hours	From Literature to Research Questions and Hypotheses: Developing Research Ideas	<p><b><u>Process</u></b></p> <ul style="list-style-type: none"> <li>• To understand why research questions and hypotheses are important</li> <li>• To understand how to identify a research topic within the literature</li> <li>• To understand how to develop a research question or hypothesis from an initial idea</li> <li>• To understand how research questions and hypotheses are different</li> <li>• To consider how research questions/ideas sit within wider philosophical concerns/questions.</li> </ul>
3 hours	Qualitative Research Design: Planning qualitative research	<p><b><u>Methods</u></b></p> <ul style="list-style-type: none"> <li>• To explore the guiding role of research questions in qualitative research.</li> <li>• To consider the different needs in developing a rationale for a qualitative study.</li> <li>• To provide information on some of the basic qualitative designs and to critically think about how you might chose a design based on your research questions, aims and underpinning epistemology.</li> <li>• To explore ethical issues requiring thought when establishing qualitative researcher.</li> <li>• To think about the role of reflectivity in the planning of qualitative research process.</li> </ul>
3 hours	Quantitative Research Design	<p><b><u>Methods</u></b></p> <ul style="list-style-type: none"> <li>• To revise basic quantitative research design knowledge</li> <li>• To outline advantages and disadvantages of different design</li> <li>• To consider factors which impact the choice of research designs</li> <li>•</li> </ul>

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
1 hour	Thesis Portfolio Overview	<p><b><u>Process</u></b></p> <ul style="list-style-type: none"> <li>• To introduce Trainees to the process of undertaking the Thesis Portfolio once they have been allocated their thesis project title</li> <li>• To provide an overview of the Pecha Kucha, Research Presentations and the Thesis Proposal</li> <li>• To consider the Research Governance frameworks within the ClinPsyD Programme</li> <li>• To introduce and signpost Trainees to relevant resources and legislation</li> </ul>
3 hours	Systematic Reviews and Meta-Analysis	<p><b><u>Methods</u></b></p> <ul style="list-style-type: none"> <li>• To familiarise trainees with meta-analysis concepts (including heterogeneity, inverse variance weights, and forest plot)</li> <li>• To enable trainees to understand and critically analyse published meta-analyses</li> <li>• To enable trainees to conduct their own meta-analyses</li> </ul>
3 hours	Research Supervision (February) Including QRF	<p><b><u>Supervision</u></b></p> <ul style="list-style-type: none"> <li>• To discuss plans for the development of thesis ideas following allocation of Trainees to supervisors and projects ahead of Pecha Kucha presentation</li> </ul>
1 day	Pecha Kucha Presentations	<p><b><u>Formative Assignment</u></b></p> <ul style="list-style-type: none"> <li>• For Trainees to demonstrate how they have developed their research ideas following the Research Fair and discussion with their Supervisor</li> <li>• To receive feedback from the Research Panel on thesis ideas</li> <li>• To ensure that the proposed study meets the requirements of a doctoral level thesis project in the field of Clinical Psychology</li> <li>• To provide experience of presenting in a Pecha Kucha style</li> </ul>
3 hours	Ethical Issues and Approvals for Research (UEA and NHS applications)	<p><b><u>Process</u></b></p> <ul style="list-style-type: none"> <li>• To consider ethical issues pertinent to research in line with NHS guidelines and BPS frameworks</li> <li>• To understand the ethical frameworks that apply to research, and how to engage with these</li> <li>• To consider what kind of ethical approval Trainees will need to consider in their Thesis Proposals.</li> </ul>

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
		<ul style="list-style-type: none"> <li>• To learn about obtaining the correct research approvals in the NHS/Healthcare to undertake Thesis research.</li> <li>• Practice completing online application forms and writing applications at a standard high-enough to enough ethical approval.</li> <li>• To introduce Trainees to the process of applying to the Faculty of Medicine and Health Sciences (FMH) Ethics Committee</li> <li>• To think about supporting documentation required by the trainee to complete their thesis research.</li> <li>• To confirm submission processes and timelines for research studies.</li> </ul>
Over Easter break	Research Supervision (March)	<p><b><u>Supervision</u></b></p> <ul style="list-style-type: none"> <li>• To discuss feedback received from the Pecha Kucha panel and further develop research ideas</li> </ul>
3 hours	Qualitative Research Design: Conducting qualitative research	<p><b><u>Methods</u></b></p> <ul style="list-style-type: none"> <li>• To think about the processes involved in collecting data and how this might differ depending on design, research questions etc.</li> <li>• To explore ethical issues commonly faced by qualitative researchers when collecting data.</li> <li>• To understand how qualitative researchers think about issues of sampling and generalisability.</li> <li>• To think about the role of reflectivity in conducting qualitative research.</li> </ul>
3 hours	Research Supervision (April) Including QRF	<p><b><u>Supervision</u></b></p> <ul style="list-style-type: none"> <li>• To further develop research ideas prior to the Trainee Research Presentations</li> </ul>
1hr	Writing a Thesis Proposal (BB session)	<p><b><u>Process</u></b></p> <ul style="list-style-type: none"> <li>• <u>To introduce the purpose of a research proposal</u></li> <li>• <u>To develop Trainee skills in how to structure and organise relevant information within a research proposal, both for the purpose of the Thesis Proposal assignment and for use in wider research activity</u></li> </ul>
1 day	Trainee Research Presentations	<p><b><u>Formative Assignment</u></b></p> <ul style="list-style-type: none"> <li>• For Trainees to demonstrate how they have developed their research ideas since the Pecha Kucha presentations</li> </ul>

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
		<ul style="list-style-type: none"> <li>• To receive feedback from staff and peers to use in developing the thesis proposal</li> <li>• To provide experience of presenting research ideas</li> </ul>
		<ul style="list-style-type: none"> <li>•</li> </ul>
3 hours	Research Supervision (May)	<u>Supervision</u> <ul style="list-style-type: none"> <li>• To discuss progress with the thesis proposal</li> </ul>
3 hours	Research Supervision (June)	<u>Supervision</u> <ul style="list-style-type: none"> <li>• To discuss progress with the thesis project following submission of the thesis proposal</li> </ul>
Over Summer	Research Supervision (July, August, September)	<u>Supervision</u> <ul style="list-style-type: none"> <li>• To discuss feedback from the thesis proposal</li> <li>• To develop a thesis supervision contract and a writing plan</li> <li>• To make plans for next steps with the empirical project, particularly in relation to applying for ethical approval</li> <li>• To discuss feedback from draft ethics applications</li> <li>• To make plans to begin recruitment (following ethical approval)</li> </ul>
1 day	Research Conference	<u>Process</u> <ul style="list-style-type: none"> <li>• All Trainees will gain experience of being involved in an academic event</li> <li>• All Trainees will develop an increased understanding of the importance of dissemination</li> <li>• 2<sup>nd</sup> and 3<sup>rd</sup> year Trainees will develop skills in presenting their research to an audience</li> </ul>

**Self-Directed Learning Resources and Additional Optional Teaching Sessions to Support the Research Module**

YEAR	TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES	NOTES
<b>Self-Directed Learning Resources</b>				
1	1½-3 hrs	Online Statistics Module	<p><b>Methods</b></p> <p>This module provides a range of online resources to support the face-to-face teaching sessions on statistical methods</p> <p>After working through these resources, Trainees will be able to:</p> <ul style="list-style-type: none"> <li>• determine which statistical tests are appropriate for various types of data</li> <li>• carry out tests of differences between two means/medians</li> <li>• carry out tests of differences between more than two means/medians</li> <li>• investigate and interpret interactions between independent variables</li> <li>• understand the advantages of within subjects designs</li> <li>• analyse associations in categorical data</li> <li>• carry out correlations</li> <li>• determine when it is appropriate to use non-parametric tests</li> </ul>	Online teaching available via Blackboard

YEAR	TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES	NOTES
			<ul style="list-style-type: none"> <li>• conduct regression analyses, including multiple regression</li> <li>• outline when more complex methods may be used, including principal components analysis, factor analysis, survival analysis, logistic regression, log linear analysis, and structural equation modelling</li> <li>• describe what statistical significance means</li> <li>• calculate the power and the number of participants required for a study</li> <li>• present results in a relevant format, including the use of means and standard deviations, effect sizes, confidence intervals, exploratory data analysis and percentages <ul style="list-style-type: none"> <li>• advise colleagues on statistical analysis methods</li> <li>• critically assess the use of statistics in publications</li> </ul> </li> </ul>	
1	1½-3 hrs	Literature Reviewing and Critical Appraisal	<p><b><u>Methods</u></b></p> <ul style="list-style-type: none"> <li>• To introduce Trainees to the stages and processes involved in conducting a systematic review</li> </ul>	Online teaching available via Blackboard

YEAR	TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES	NOTES
			<ul style="list-style-type: none"> <li>To provide an opportunity to practice critiquing a systematic review</li> </ul>	
<b>Additional Optional Teaching Sessions</b>				
<b>Year 1: February and April</b>	1 hour	Qualitative Research Forum	<u>Methods</u> <ul style="list-style-type: none"> <li>To provide specific support with issues pertaining to individual qualitative Trainee research projects</li> </ul>	
<b>Year 1 Summer Teaching Day</b>	Drop-in	Drop-in sessions for ethics, research design and analysis	<u>Methods</u> <ul style="list-style-type: none"> <li>To provide specific support with ethical issues, research design and quantitative/qualitative analysis issues pertaining to individual Trainee research projects</li> </ul>	

## References:

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). *Introduction to Meta-Analysis*. London, John Wiley & Sons

Braun, V & Clarke, V. (2014). *Successful Qualitative Research: A Practice Guide for Beginners*. London, UK: Sage

Clark-Carter, D. (2010). *Quantitative Psychological Research, 3<sup>rd</sup> edition* ; The complete student's companion. Hove, UK : Psychology Press.

Cooper, H.M. (2016). *Research Synthesis and Meta-Analysis: A Step-by-Step Approach, 5<sup>th</sup> edition*. Sage Publications.

Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics, 4<sup>th</sup> edition*. London, UK: Sage.

Lipsey, M. W., & Wilson, D. (2000). *Practical Meta-Analysis*. Sage Publications.

Smith, J. A, Flowers, P. & Larkin, M. (2009). *Interpretative Phenomenological Analysis: Theory, Method, Research*. London, UK: Sage.

Tabachnick, B.G. & Fidell, L.S. (2013). *Using Multivariate Statistics, 6<sup>th</sup> edition*. Harlow, UK; Pearson Education.