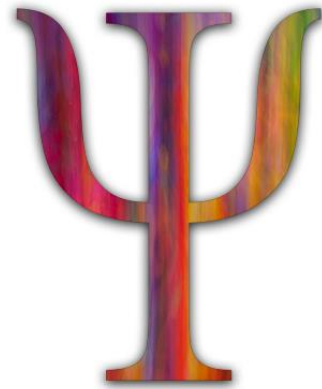


School of Psychology Module Handbook 2016-2017	
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# Research Skills in Psychology 2

First year: C8891



Module Convenor: Dr Susan Sullivan

## **MODULE DOCUMENTATION: RESEARCH SKILLS 2 (2016-2017)**

### **TIMING AND DURATION:**

A first year, 15 credit module for all psychology students, running in the spring term.

### **CONTACT HOURS AND TEACHING METHODS:**

One lecture per week, starting in week 1 and ending in week 12.

One 2-hour practical per week, starting in week 2 and ending in week 12.

### **MODULE OUTLINE:**

The aim of this module is to introduce you to some further skills necessary for conducting and understanding psychological research. Research involves coming up with a relevant question first (for example, “Does violence depicted in movies/TV lead to violent behaviour in viewers?”). And then designing a study to investigate that question, collecting data, and then analysing and interpreting the data to see how they come out in relation to the question. The final step is to report the findings and conclusions in a clear manner that is comprehensible to other scientists/people. The skills that you will learn in Research Skills 2 will be useful not only in the first- and second-year research methods modules, but also for many other modules too. They will also help you to understand and critically evaluate published research. You will get an introduction to using computer software for analysing data and producing graphs.

We will start the term with general concepts like Experimental Design and end with Analysis of Variance (ANOVA), which is a powerful technique for data analysis. Along the way we will meet concepts such as Hypothesis Testing and another very important technique for data analysis: the t-test. Every quantitative subject is learned by doing, and statistics is no exception. There is no substitute for this. Alongside the lectures, there will be practical sessions where you will have the opportunity to learn more by doing and interacting with the tutors. The practical sessions are a good place to start learning to perform statistical tests, where a knowledgeable person will be present to help you with your questions.

The following concepts will be expected to be understood by the end of the module: Experimental Design; Probability; Hypothesis Testing; Independent & Repeated Measures t-test; and Independent & Repeated Measures ANOVA; Wilcoxon; Mann Whitney; Chi-Square; McNemar and Fisher’s. You should be able to use SPSS to perform basic data analysis and be able to interpret SPSS output satisfactorily. Finally, you should also be able to present data both graphically and in table form, and understand the conventions for presenting statistical results. You should be able to write up results of a study in a lab-report that follows the format used by psychology journals.

### **MODULE OBJECTIVES:**

The aim of the module is twofold: it is to familiarize you with basic techniques of data description and introduce you to the notion of statistical inference, using a minimum of mathematics; and it is to provide you with useful IT skills that you can use in the

Research Skills 2 as well as other modules. By the end of the module you should know which situations are appropriate for applying which inferential tests covered (t-test or ANOVA), and you should be able to contrast these with statistical tests covered last term in Research Skills 1, you should be able to perform t tests and ANOVAs using SPSS, and be able to interpret the SPSS output. You should also know how to write a scientific report of experiments carried out, adhering strictly to the relevant conventions (currently those outlined in the latest edition of the Publication Manual of the American Psychological Association).

#### **LEARNING OUTCOMES:**

By the end of the module a successful student should be able to:

- Analyse data using statistical techniques with SPSS.
- Understand the strengths and weaknesses of the methods used in psychological research.
- Produce write-ups of research results, using APA conventions.
- Use the Internet and library electronic resources to find relevant published research on which to base their lab reports.

#### **METHOD OF STUDENT FEEDBACK:**

The module convenor will create opportunities for you to provide feedback (online, on paper, and/or in person) on your experience of the module during the term. In addition, you will be asked to complete an online course evaluation questionnaire at the end of every term, and this will provide an opportunity for you to comment on each module as well as the course overall.

#### **MODE OF ASSESSMENT:**

The module is assessed by a combination of unseen exam and coursework. It's the *overall* mark that counts, not just the exam mark - so it is very worth your while to do all the coursework! If you do fail the module, you may be required to do a resit. A sample exam will be available so that you know what to expect for this part of the assessment.

<b>Type of assessment</b>	<b>Value</b>
Unseen exam (summer term):	<b>60%</b>
Coursework: overall	<b>40%</b>
Poster:	14.8%
Lab-report:	15.2%
Research participation	10%

Coursework makes up 40% of your overall mark. The most important thing is to get the work in on time - late submissions incur a penalty. Additionally, feedback on the coursework will help you understand what is required and help you to improve subsequent work. There are a number of aspects to a lab-report write-up that are done by convention, and to get top marks you must follow these conventions. Even a bad write-up

will provide you with feedback that will tell you what needs to be done to get a better mark next time.

**(a) Unseen exam:**

The exam contributes 60% of the final mark. This is an unseen exam, covering your understanding of statistical concepts, and testing your ability to perform statistical tests and understand SPSS output. You can take into the exam a university-approved calculator<sup>1</sup>.

**(b) Lab-report: e-submission**

One lab-report must be written. Max length is 2000 words. This will be a write-up of a study that will be undertaken during the autumn term. It must be written up in accordance with the conventions stipulated by the American Psychological Association (APA) - full guidance will be given on this during the module.

**(c) Poster Presentation:**

One poster must be designed, and verbally presented to an allocated tutor. Full guidance will be given on this during the module. **For your poster coursework submission, one copy of your poster must be submitted to the Psychology School Office, located in Pevensey 1, 2A13.**

**(d) Research participation:**

Taking part in research is one of the best ways to learn how real research is done. There is a sufficient range of research going on that you should be able to find something to volunteer for that you're happy to do. Whether participating or assisting, at the end of the study the researcher will explain to you the aims of the study ('debrief' you) and give you the chance to ask any questions (whether to do with design/method or the topic itself). In return for satisfactory participation in a total of 4 hours of psychology research during the autumn term, you will be credited with 10% of the overall mark. *This is an all-or-nothing arrangement: you will receive no marks at all for doing anything less than 4 hours of participation.* Each study in which you participate is worth some multiple of 15 minutes. This participation can include both taking part in studies (such as filling in someone's questionnaire or doing someone's experiment) **and** assistance in studies (such as handing out someone's questionnaires to others, or assisting with data entry or stimulus production). The main way that you will be notified about studies is through a computerised research participation management system called SONA. You can find details about this at

<http://www.sussex.ac.uk/psychology/internal/students/researchparticipationscheme>

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<sup>1</sup> The *Examination handbook* has information on the use of approved calculators in the exam room. At the time of writing, you are *only* allowed to use one of the following: Casio fx-82, fx-83, fx-85, fx-115, fx-570 or fx-991 (all with any suffix). The university rules say that "you are not allowed to take instruction notes or booklets relating to your calculator into the exam (except for the insert on the cover)", but that's a bit silly given that you can take any notes that you like into this exam! My suggestion is that (a) you familiarise yourself with how to use your calculator before the exam (best option) or (b) write out the necessary instructions in your own words and take them into the exam with you in that way.

### **GETTING ASSISTANCE:**

Research skills is a module that can be intimidating to some students. If you have a problem, the most important thing is to seek help - problems can often be fixed easily if they are caught early. Trying to ignore them will not make them go away, and you will merely fall further and further behind! Often asking someone else on the module can make something that initially seems complicated seem clear. If you still have problems, ask the course tutors who take the practicals and statistics classes - they are there to help you, so do not be afraid to use them! Your personal tutor may also be able to help.

### **MODULE CONVENOR:**

Dr Susan Sullivan (s.r.sullivan@sussex.ac.uk)

### **LOCATION AND TIMES OF SESSIONS:**

Location and times of lectures and practicals will be supplied on Sussex Direct.

### **ASSESSMENT INFORMATION**

Assessments deadlines and methods of submission can be found on your assessment timetable via Sussex Direct.

Information on the following can be found at the link below:

- Submitting your work
- Missing a deadline
- Late penalties
- Exceptional circumstances
- Exams
- Help with managing your studies and competing your work
- Assessment Criteria

<http://www.sussex.ac.uk/psychology/internal/students/examinationsandassessment>

### **Useful reading material:**

Field, A. and Hole, G. (2003). "How to design and report experiments". London: Sage.

Field, A.P. (2005). "Discovering statistics using SPSS (Second Edition)". London: Sage.

Wright, D. (2002). "First steps in statistics". London: Sage.

It's also worth reading the following "popular science" book, as it's a brilliant demonstration of why it's useful to learn about statistics and research methods.

Goldacre, B. (2009): "Bad Science". London: Harper Perennial.

Goldacre's website is also worth a look: <http://www.badscience.net>

***Help for the maths-phobes:***

There is minimal maths in this module, and everything will be explained as we go along, using as little maths as possible. However if you feel you need to brush up on your arithmetic and algebra, the following is a very accessible paperback that will help you do just that. This is what one of the reviewers on Amazon said:

"This book has changed my whole attitude to a subject that I hated at school and have never had any confidence in. Just flicking through it was enough to make me realise that I could actually understand things straight away that I had always thought I couldn't do! It was a real eye-opener for me and has given me the confidence to face up to something that I have always avoided. I was so chuffed I wrote an email to the author to thank him and got a lovely email back from him straightaway. If you didn't keep up with maths at school or thought everybody else 'got it' whilst you got left further and further behind then this is a great book for you".

Lawler, G. (1999) "Understanding maths: basic mathematics explained". Studymates.co.uk.