

Module Information

2022.01, Approved

Summary Information

Module Code	4505PSYSLI
Formal Module Title	Research Methods and Statistics in Psychology 2: Testing for Differences
Owning School	Psychology
Career	Undergraduate
Credits	10
Academic level	FHEQ Level 4
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name
Sri Lanka Institute of Information Technology

Learning Methods

Learning Method Type	Hours
Lecture	10
Workshop	22

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

Aims and Outcomes

Aims	1. To introduce the tools for carrying out a literature search.2. To develop an understanding of basic statistical concepts, descriptive statistics, t-tests, Mann-Whitney U test, Wilcoxon Matched Pairs, ANOVA, post-hoc testing.3. To use SPSS to carry out statistical analyses.4. To give practical experience of between subjects research methods.5. To develop practical report writing skills.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Write a practical report conforming to APA style.
MLO2	2	Employ the appropriate statistical test, and interpret its outcome.
MLO3	3	Demonstrate a basic knowledge of the generic principles of research design statistical testing.

Module Content

Outline Syllabus	The module will explore different approaches to research design with a focus on the differences between testing for between and within-group differences, for example, t-test, Mann Whitney U test, Wilcoxon Matched Pairs, ANOVA and post-hoc tests using SPSS. Research report writing will be re-discussed with an emphasis on experimental designs. Advanced data processing (e.g. outlier analysis and transformation) will be discussed. Students will also gain experience of questionnaire design, and will develop understanding of ethical principles and procedures in research design.
Module Overview	
Additional Information	This module provides students with a practical introduction to how to design an experiment, collect data in an ethical manner, perform statistical analysis and write up findings in a manner consistent with published material. Throughout the module students will be required to use computers to conduct literature searches and to perform statistical analysis. In the module students will be introduced to the basic principles of experimental research design, they will then learn more complex statistical tests for differences between two groups (t-test, Mann Whitney U test, Wilcoxon Matched pairs) and three groups (ANOVA). Students will also learn the basics of questionnaire design. Students will demonstrate their learning through the coursework task by writing a scientific practical report and an additional results section. Both components together ensure both depth and breadth of understanding.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Portfolio	Portfolio	100	0	MLO1, MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Simon Cooper	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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