

Research Methods and Statistics in Psychology 4: Advanced Quantitative Research Methods

Module Information

2022.01, Approved

Summary Information

Module Code	5202PSYSCI
Formal Module Title	Research Methods and Statistics in Psychology 4: Advanced Quantitative Research Methods
Owning School	Psychology
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Psychology

Learning Methods

Learning Method Type	Hours
Lecture	22
Online	4
Workshop	20

Module Offering(s)

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

Aims and Outcomes

Aims	1. To examine the rationale behind and use of advanced tests of differences and relationships in psychological research.2. To develop an understanding of factorial analysis of variance (ANOVA), multivariate analysis of variance (MANOVA), simple regression and multiple regression.3. To analyse data using advanced statistical tests such as factorial ANOVA, MANOVA and multiple regression.4. To provide practical experience of between participant, within participant, mixed, MANOVA and correlational designs.5. To use SPSS to carry out statistical analyses.6. 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	Choose appropriate methods and statistics to analyse quantitative data.
MLO2	2	Perform appropriate advanced parametric analyses.
MLO3	3	Interpret analysis produced by a computer-based statistical package (SPSS).
MLO4	4	Write a practical report in APA style.

Module Content

Outline Syllabus	The module considers advanced inferential tests of difference and relationships. The tests covered include three types of factorial ANOVA (independent/repeated measures/mixed), ANCOVA, MANOVA, and multiple regression. The focus is on research designs in which there is either more than one independent/predictor variable or more than one dependent variable. The module also examines the utility of reporting effect sizes in quantitative studies and the importance of conducting ethical research.
Module Overview	This module enables you to examine the use of advanced tests of differences and relationships in psychological research. You will develop an understanding of factorial analysis of variance (ANOVA), multivariate analysis of variance (MANOVA), simple regression and multiple regression.
Additional Information	This is a core module for students on the following degree programmes: Criminology and Psychology; Forensic Psychology and Criminal Justice; and Psychology.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Practical report	70	0	MLO1, MLO2, MLO4
Centralised Exam	Exam	30	2	MLO3

Module Contacts

Module Leader

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

Simon Cooper	Yes	N/A
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Partner Module Team

Contact Name	Applies to all offerings	Offerings
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