

RESEARCH: QUALITY, PRODUCTIVITY, AND IMPACT

Detailed Content:

- **Day 1 (15th April): Introductions and contexts**
 - Science, research, and the society
 - The research context: inputs and outputs
 - Defining quality, productivity, and impact
 - Measuring quality, productivity, and impact
 - Relationship between quality, productivity, and impact
 - The research productivity equation
 - Research ethics and impact on quality, productivity, and impact
- **Day 2 (22nd April): Consequences of poor quality and non-impact research**
 - Global perspectives and trends
 - Economic aspects
 - Research values versus wastage
 - Research frauds and misconducts: case studies
- **Day 3 (29th April): Thinking quality and impact in the research**
 - The research process: an overview
 - Framework for thinking quality and impact in the research process
 - Quality and impact in research question formulation
- **Day 4 (6th May): Quality and impact in study implementation**
 - Setting up the research team
 - Setting up the study context
 - Look before you leap: importance of the protocol/study plan
 - Quality in participant recruitment
 - Quality in developing study instruments and measurements
- **Day 5 (13th May): Quality in data collection**
 - Main types of data collection methods
 - Benefits of good data collection
 - Integrating quality in data collection
 - Data collection gone wrong: avoiding pitfalls of poor data collection

Detailed Content (continues):

- **Day 6 (20th May): Quality in data analysis (part 1)**
 - Pre-data analysis considerations
 - Reproducibility considerations
 - Quality in data cleaning
 - Quality in variable definition and coding
- **Day 7 (27th May): Quality in data analysis (part 2)**
 - First things first: the data analysis protocol and how to develop it
 - Reproducibility practices in data analysis: benefits of the syntax file and how to create it reproducibly
 - Choosing the right analysis approaches for your data
 - Performing the data analysis: key considerations
- **Day 8 (3rd June): Quality in data analysis (part 3)**
 - Quality in interpreting results: what do your findings mean
 - Overinterpretation, exaggeration, and overconfidence
 - Staying within the limits and consequences of off-limits
 - Storytelling in data interpretation
- **Day 9 (10th June): Quality in writing up research findings**
 - Setting the context: quality in literature review
 - Quality in referencing
 - Being collegiate enough: tips and tricks to avoid plagiarism
- **Day 10 (17th June): Quality in publishing**
 - Quality and choice of what to publish
 - Cherry-picking versus patriotism
 - Reporting guidelines and research quality
 - Quality in choice of journals
 - Quality in manuscript review processes
 - From idea to quality and impact: finding the steps in a thousand mile
- **Day 11 (24th June): Group presentations and conclusions**
- **Day 12 (1st July): Group presentations and conclusions**