

Lecture 04: 04

04

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Key topics today

The week ahead (week 4)

- Personal Tutor Meeting about well-being
- Departmental Seminar (week 5)
- Design & Analysis Quiz due next week (week 5)
- Research as a human enterprise
- Lab preview Keep pressing on with Critical Proposal (due week
 5)
 - Try to nail down your variables and your design ON THE PAGE!



Personal Tutor Meeting Week 4

This week (week 4) your PT session is all about well-being



Please familiarise yourself with well-being services available in college

https://www.gold.ac.uk/students/wellbeing/wellbeing-service/



Departmental Seminar (week 5)

1 Dr Valentina Cazzato Liverpool JMU

Behavioural and Neural Signatures of Visual Body (mis)perception

Thursday, 3 November 2022 at 16:00 - 17:00 - RHB 300a

Visual representation of the body is a key aspect of self-body image. Its importance in our social life is proved by the unreasonable time and effort we put on taking care of our physical appearance, including use of plastic surgery, as well as by the severe mental disorders linked to its disturbance, such as Eating Disorders.



Any Questions?



In the first lecture I mentioned...





But what did I mean?

Your individual 'take' on Psychology?

The Psychology you need or want for the future?

A career path with hundreds of different routes?

or is it more personal than that?



Do you need a 'passion' in Psychology?

We (staff) talk about this sometimes.

Is it critical that you find a topic of interest to you?

Does it help? Does it hinder?

Is it possible to be a Psychologist without a personal stake?



Around us a crisis is unfolding

Science has been in a "replication crisis" for a decade. Have we learned anything?

Bad papers are still published. But some other things might be getting better.

By Kelsey Piper | Oct 14, 2020, 12:20pm EDT



Psychology is grossly misunderstood

Public Skepticism of Psychology

Why Many People Perceive the Study of Human Behavior as Unscientific

Scott O. Lilienfeld Emory University



Next week

The Replication Crisis and our ongoing response - Open Science The practice of Psychology we encourage in you!



Research & me-search

PLOS ONE

RESEARCH ARTICLE

When research is me-search: How researchers' motivation to pursue a topic affects laypeople's trust in science

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(altenmuller2021?)



Reflexivity

Reflexivity and the psychologist

Reflexivity generally refers to the examination of one's own beliefs, judgments and practices during the research process and how these may have influenced the research.

An integral part of the Qualitative 'tradition'

(morawski2005?)



Inclusive Research

Inclusive research is a term that was coined in the early twenty first century to embrace participatory and emancipatory approaches to research with people with learning/intellectual disabilities (Walmsley 2001)

Inclusive research embraces <u>participatory</u> and <u>emancipatory</u> approaches to research.

Its characteristics are that it:

- · Is owned (not necessarily initiated) by lay people
- · Furthers the interests of lay people, researchers are on their side
- · Is collaborative
- Enables lay people to exercise control over process and outcomes
- Produces outputs that are accessible.



context

Research situated within the wider rights movement.

"Nothing about us without us" (Aspis, 2000).

a slogan of the disabled people's movement, has been applied to research as well as other areas.

"exclusivity not only touches but also contorts and diminishes all aspects of psychological science" (Ledgerwood et al., 2022, p.2).

(ledgerwood2022?)



OSF (Open Science Foundation)



When Research is Mesearch: How Researchers' Motivation to Pursue a Topic Affects Laypeople's Trust in Science

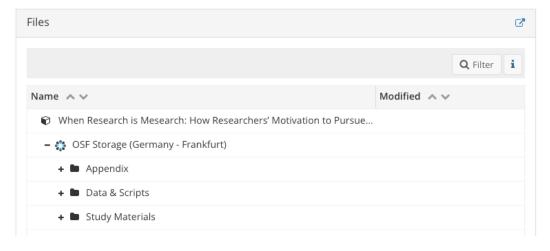
Contributors: Marlene Sophie Altenmüller, Leonie Lucia Lange, Mario Gollwitzer

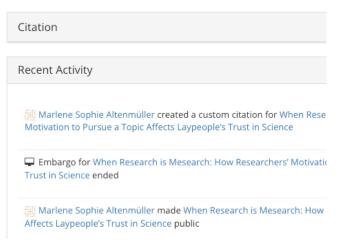
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Category: Project

Description: Research is often fueled by researchers' scientific, but also their personal interests: Sometimes, researchers decide to pursue a specific research question because the answer to the themselves: Such "me-search" may not only affect the quality of research, but also how it is perceived by the general public. In two studies (N=621), we investigate the circumstances under whice increases or decreases laypeople's ascriptions of trustworthiness and credibility to the respective researcher. Results suggest that participants' own preexisting attitudes towards the research to substantially: When participants hold favorable attitudes towards the research topic (i.e., LGBTQ or veganism), "me-searchers" were perceived as more trustworthy and their research was perceived when participants held unfavorable attitudes towards the research topic. Study 2 furthermore shows that trustworthiness and credibility perceptions generalize to evaluations of the efuture research and practice are discussed.

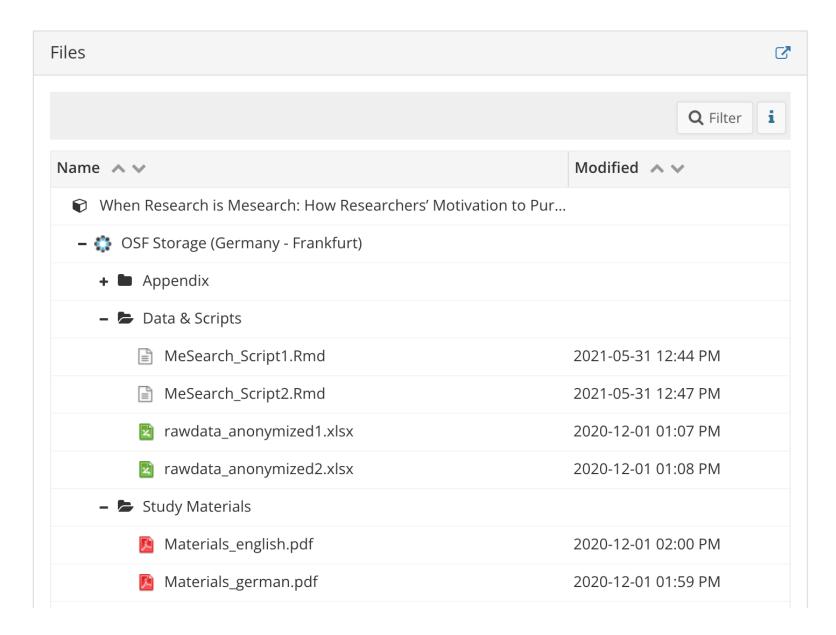
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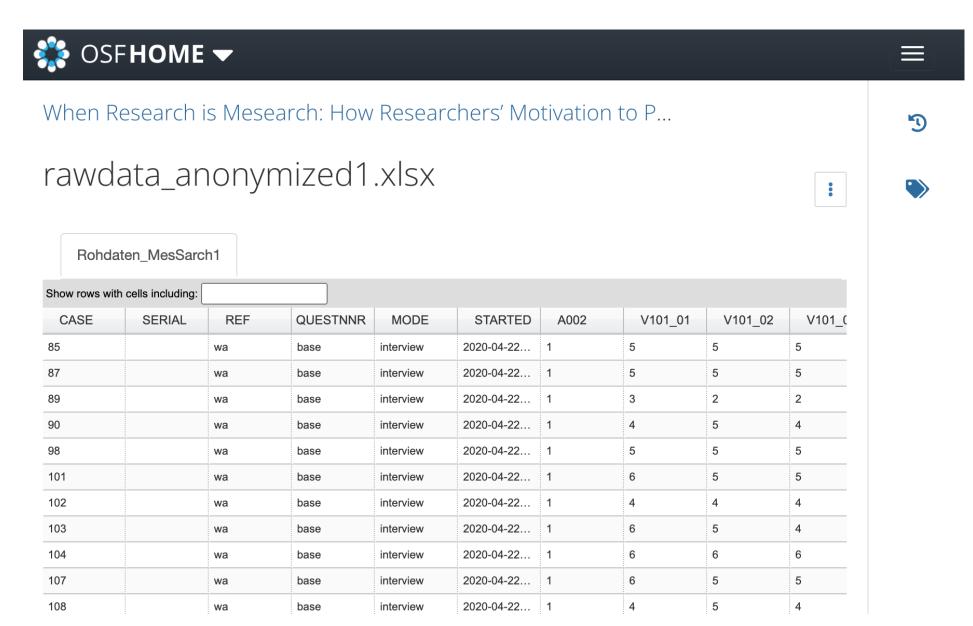


Open Data and Open Materials



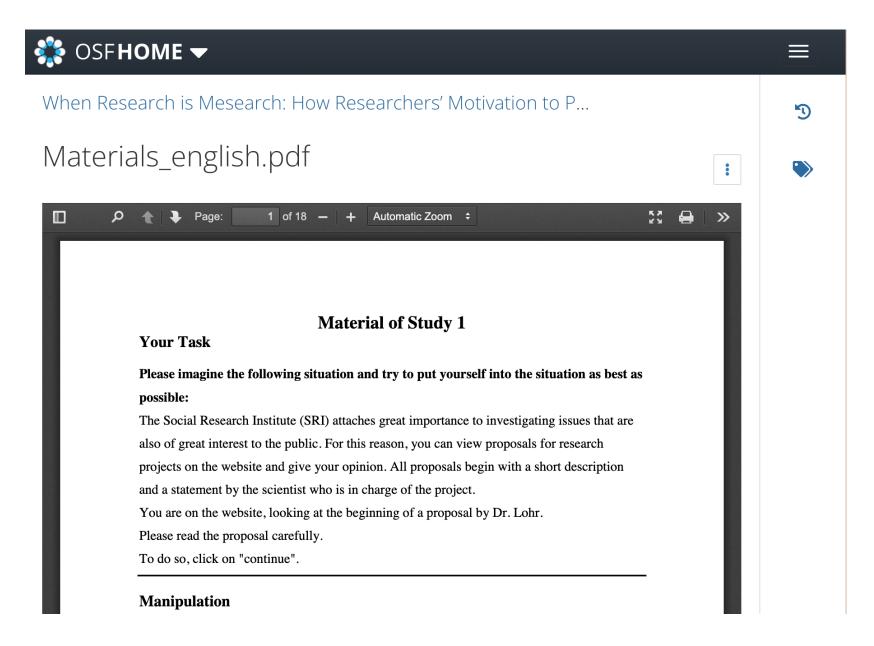


Open Data





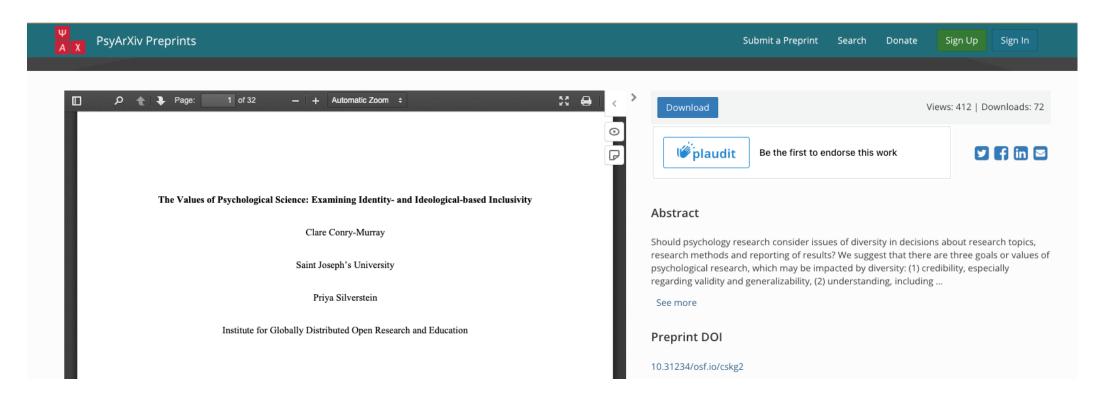
Open Materials





Psyarxiv

(conry-murray2022?)





Questions?



Lab activities

Keep working!

Formalise your individual design

2x2		IV 1	
Design		IV1: Level 1	IV1: Level 2
IV 2	IV2: Level 1	dv	dv
	IV2: Level 2	dv	dv



More specific

2x2 Design		Time of Day	
		Morning	Afternoon
Caffeine	Some Caffeine	dv	dv
	No Caffeine	dv	dv



Notation

We use a notation system to refer to these designs:

2x2 = Two-way ANOVA. There are two IVS, the first IV has two levels, the second IV has 2 levels. There are a total of 4 conditions, 2x2 = 4.

2x3 = Two-way ANOVA. There are two IVs, the first IV has two levels, the second IV has three levels. There are a total of 6 conditions, 2x3 = 6

4x4 = Two-way ANOVA. There are two IVs, the first IV has 4 levels, the second IV has 4 levels. There are a total of 16 condition, 4x4=16

2x3x2 = Three-way ANOVA. There are a total of three IVs. The first IV has 2 levels. The second IV has 3 levels. The third IV has 2 levels. There are a total of 12 condition. 2x3x2 = 12.



Review

Crump, M. J. C., Navarro, D. J., & Suzuki, J. (2019, June 5). Answering Questions with Data (Textbook): Introductory Statistics for Psychology Students. https://doi.org/10.17605/OSF.IO/JZE52

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https://crumplab.com/statistics/07-ANOVA.html

https://crumplab.com/statistics/10-MixedANOVA.html#x2-designs



3 'flavours' of 2x2 ANOVA

2bx2b - Between-subjects/Factorial ANOVA

2wx2w - Within-subject/Repeated Measures ANOVA

2bx2w or 2wx2b - Mixed ANOVA

You will be using one of these (all supported by SPSS Exercise 1 & 2)

JAMOVI is a reasonable alternative to SPSS R is even better - much more value as a skill



The 3 effects possible in a 2x2 ANOVA

Main effect of IV1

Main effect of IV2

Interaction of IV1*IV2



therefore 8 possible 'outcomes' of a 2x2 ANOVA

- no IV1 main effect, no IV2 main effect, no interaction
- IV1 main effect, no IV2 main effect, no interaction
- IV1 main effect, no IV2 main effect, interaction
- IV1 main effect, IV2 main effect, no interaction
- IV1 main effect, IV2 main effect, interaction
- no IV1 main effect, IV2 main effect, no interaction
- no IV1 main effect, IV2 main effect, interaction
- no IV1 main effect, no IV2 main effect, interaction

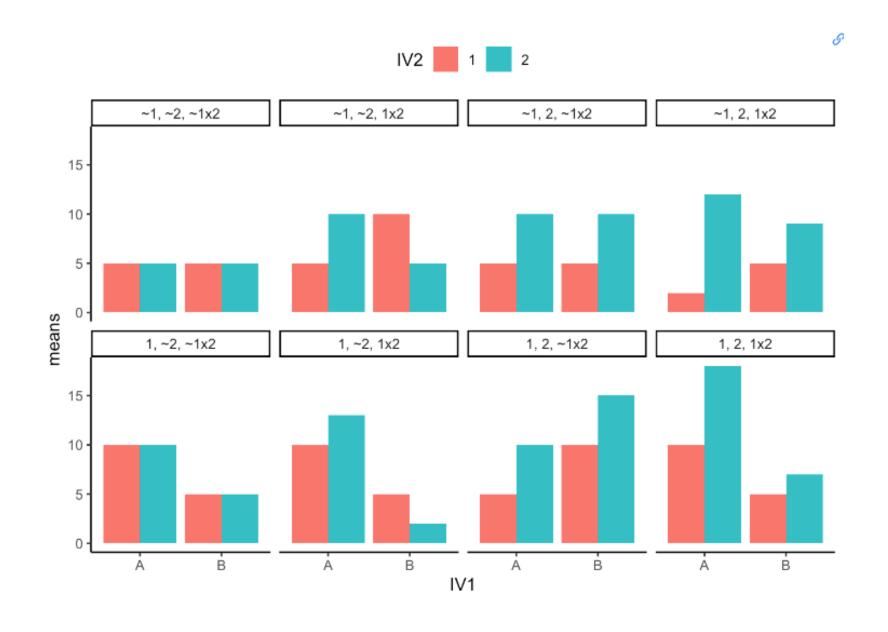


graph key

- 1 = there was a main effect for IV1.
- ~1 = there was **not** a main effect for IV1
- 2 = there was a main effect for IV2
- ~2 = there was **not** a main effect of IV2
- 1x2 = there was an interaction
- ~1x2 = there was not an interaction

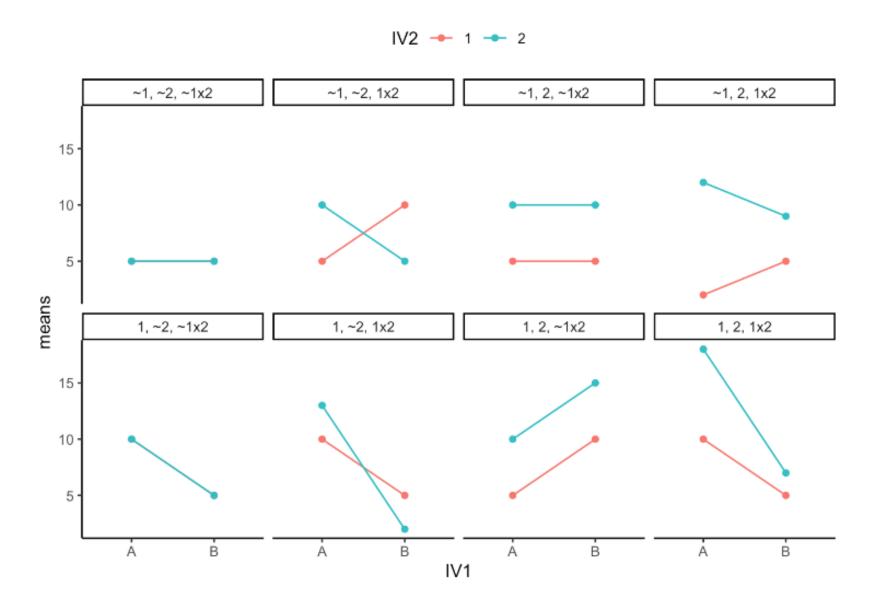


Bar charts





Line plots





References

