Moving from questionable to Open Science practices: the importance of incorporating open science into research practices

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Background

- Bachelor 2008-2011: social psychology (Utrecht University)

- Research master 2011-2013: Social & Health psychology (Utrecht University)

- PhD: The Interdisciplinary Center Psychopathology and Emotion regulation (ICPE), Psychiatry Department UMCG
P-hacking

Bachelor thesis:
Does lowering the inhibition system of people lead to less psychological distance from a stereotyped person?

Measure:
-Psychological distance (30 items)
P-hacking

Bachelor thesis:
Does lowering the inhibition system of people lead to less psychological distance from a stereotyped person?

Measure:
- Psychological distance (30 items) **NO EFFECT**
  - Exp 1: 5 “trust” items **EFFECT**
  - Exp 2: 5 “trust” items **NO EFFECT**
  - 7 “aversion” items **EFFECT**
Publish!

- Presented at Dutch association of social psychology conference

- Felt BAD!

- Being transparent was a huge RELIEF
File drawer problem

- I tried to replicate existing research
- Did several experiments
- All null findings!

- Is it me?
- Did I do something wrong?
- It felt BAD!

Fellow student: “Person X prohibits publication of any experiment that does not confirm original effect”
Publish! High impact!

Graduate School of Medical Sciences (GSMS)
- Mandatory course: Ethics of Research and Scientific Integrity for Researchers.

GSMS guideline:

“it is important to strive for publication in high-ranked journals”

2 publications in Q1 journal = financial bonus

SHARE: Top 10% publication award
(Do not) Publish! High impact!

GSMS guideline:

“it is better to include experimental data that cannot be published in a high ranked journal in a chapter of the thesis than to publish these in a low ranked journal”

This is promoting file drawer problem!

“Why the GSMS board should take the Ethics course”
How Open Science practices help

Preregistration:
- Protects from reviewers or supervisors changing the story line
- Protects from questioning yourself
- Transparency
- Gives peace of mind
How Open Science practices help

Registered report:
- If design is appropriate, guarantees publication
- Don’t have to worry about null findings
- Get feedback when it matters
- Avoids disappointment
How Open Science practices help

Sharing data & code:
- Enables error detection
- Increases trust
How Open Science practices help

Implements career perspectives
- Research replicates better
- Improves your reputation

DORA
- Impact factors not used for evaluation of grants / job applications (GSMS guidelines not future proof!)
Moving to an Open Science Future

- Preregistration, sharing codes, and data (if possible) mandatory
- SHARE Open Science Award
- This symposium
- Open Science Community Groningen
Conclusion

Incorporating Open Science practices is doing the right thing & Benefits you as researcher

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