

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

Maurits Masselink

m.masselink@umcg.nl
Twitter: @masselinkmw



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

...and this is where we put the non-significant results.



someecards
user card

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

Improves 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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