# Examining the prevalence of positive results and research groups' scientific productivity in a German clinical psychology sample

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**Deutscher Psychotherapiekongress 2025**
08.04.2025 - Flashlight session 6



# Positive Results in Psychology

## Positive Results

- Findings that fully or partially support a tested hypothesis (Fanelli, 2012)
- Studies find high prevalence of positive results in psychology: 91-97% (Sterling, 1959; Sterling et al., 1995; Open Science Collaboration, 2015; Scheel et al., 2021).

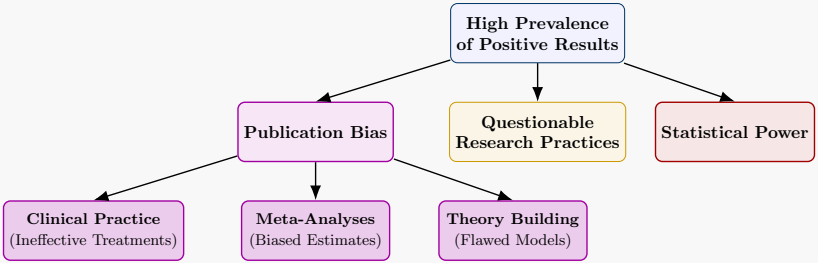


**Figure 1.** Positive results prevalence and publication bias

(Fanelli, 2012; Scheel et al., 2021; Monsarrat and Vergnes, 2018; Sterne et al., 2005)

# Theoretical Model of Publication Bias Incentivation

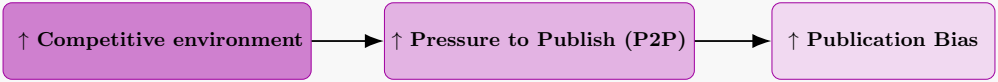


**Figure 2.** Theoretical model of publication bias incentivation

(Fanelli, 2010b,a, 2012; van Dalen and Henkens, 2012; Tian et al., 2016)

# Research Gap

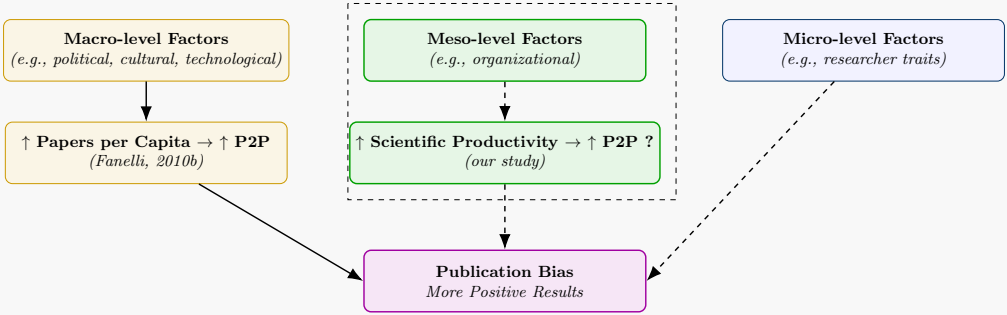


**Figure 3.** Potential factors influencing publication bias

## Scientific Productivity Defined

$$\text{Scientific Productivity} = \frac{\text{Number of Quantitative Empirical Publications of Research Group}}{\text{Number of Academic Staff in Group}}$$

# Research Question and Pre-registered Hypothesis

## Research Question

Does scientific productivity of research groups influence the prevalence of positive results in clinical psychology publications?

## Main Hypothesis (H1)

Research groups with lower scientific productivity would report a lower prevalence of positive results than those with higher scientific productivity.

## Secondary Hypothesis (H2)

Higher publication counts of research groups are associated with higher rates of positive results.

# Data Collection Framework

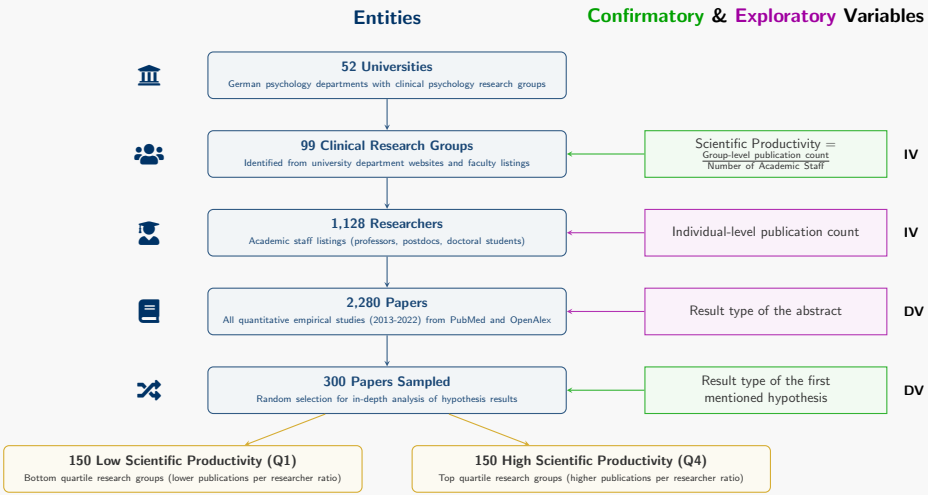


**Figure 4.** Data collection framework

# Results

- **Overall positive results rate:** 89.67%
- **No support found for H1:** observed difference of -0.67% in positive results rate between Q1 and Q4 was not statistically significant (H1: $\chi^2(1) = 0.00,\ p = .500$).
- **No support found for H2:** higher group-level publication counts not associated with higher rates of positive results ($OR = 1.00$, *95-% CI* [0.995, 1.017], $p = 0.356$)
- **Exploratory Results:** No effects of individual paper counts nor differences in abstracts-level positive results rates

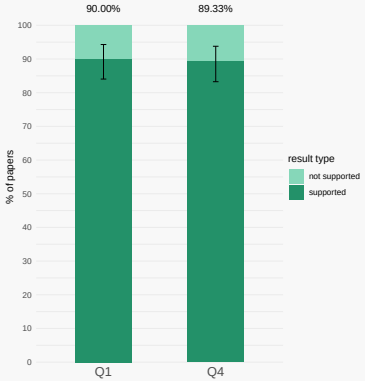


**Figure 6.** Positive results rate by scientific productivity quartile

# Key Takeaways

- Excess of positive results in clinical psychology (89.67%)
- No relationship found between research group productivity and positive result rates

# Thank you for your attention!


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