The role of technical copyeditors as watchdogs and negotiators: DETECTING AND REMOVING SPIN

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The role of technical copyeditors as watchdogs and negotiators

THE LANCET

- Introduction
  - *Lancet* Senior Editors *vs* Assistant Editors
- Detecting and removing spin from research articles after acceptance
  - What to look for: examples
  - Solutions
- Negotiation with authors
- Questions

The Assistant Editor team

Post-acceptance technical copyeditors

Responsible for editing papers across the ten *Lancet* journals

Responsible for preparing paper for publication; last people on the Editorial department to see paper before publication

Editors at *The Lancet*

"Senior Editors"	"Assistant Editors"
• Pre-acceptance • Peer-review editors	• Post-acceptance • Technical copyeditors (continuation of peer-review process)
Role in detecting misconduct • Authorship issues • Falsification or fabrication • Plagiarism • Undeclared conflicts of interest	*Role in detecting misconduct* • Data inaccuracies/number typos • Not reported according to required guidelines • Spin

Detecting and removing spin

What is spin?

"Spin represents specific reporting strategies, either intentional or unintentional, to convince the reader that the beneficial effect of the experimental intervention in terms of efficacy and safety is greater than that shown by the results."

- Misleading reporting
- Inadequate interpretation
- Inadequate extrapolation

107 (84%) of 128 articles assessed had at least one example of spin in their abstract

Lazarus C, Haneef R, Ravaud P, Boutron I. **Classification and prevalence of spin in abstracts of non-randomized studies evaluating an intervention.** *BMC Med Res Methodol* 2015; **15:** 85.

Detecting spin: **misleading reporting**

- **Selective reporting (pre-planned endpoints don't match)**

Lazarus C, Haneef R, Ravaud P, Boutron I. **Classification and prevalence of spin in abstracts of non-randomized studies evaluating an intervention.** *BMC Med Res Methodol* 2015; **15:** 85.

Detecting spin: **selective reporting**

- The COMPare (CEBM Outcome Monitoring Project)
- Between Oct, 2015, and Jan, 2016, systematically checked every trial published in the top five medical journals, to see if they misreported their findings
- Compared each clinical trial report with its protocol or registry entry
- Wrote letters to the journals pointing out when unreported or added outcomes were detected

COMPARE
TRACKING SWITCHED OUTCOMES IN CLINICAL TRIALS

67	9	354	357
TRIALS CHECKED	TRIALS WERE PERFECT	OUTCOMES NOT REPORTED	NEW OUTCOMES SILENTLY ADDED

The NEW ENGLAND JOURNAL of MEDICINE
THE LANCET
JAMA
Annals of Internal Medicine
Established in 1927 by the American College of Physicians
BMJ

The COMPare Trials Project. Ben Goldacre, Henry Drysdale, Anna Powell-Smith, Aaron Dale, Ioan Milosevic, Eirion Slade, Philip Hartley, Cicely Marston, Kamal Mahtani, Carl Heneghan. www.COMPare-trials.org, 2016.

Detecting spin: **misleading reporting**

- Selective reporting
- **Misleading description of study design (eg, more robust than it actually is, see EXAMPLE)**

Lazarus C, Haneef R, Ravaud P, Boutron I. **Classification and prevalence of spin in abstracts of non-randomized studies evaluating an intervention.** *BMC Med Res Methodol* 2015; **15:** 85.

Detecting spin: misleading reporting

- Example of **misleading description of study design**

"Based on this prospective case control study tranexamic acid seems not to have a benefit in posterior lumbar spine surgery."

It was a retrospective study involving 97 patients and nothing was prospective in this study.

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Detecting spin: **misleading reporting**

- Selective reporting
- Misleading description of study design
- **Use of linguistic spin (descriptive/poetic language to emphasise a beneficial effect)**

Lazarus C, Haneef R, Ravaud P, Boutron I. **Classification and prevalence of spin in abstracts of non-randomized studies evaluating an intervention.** *BMC Med Res Methodol* 2015; **15:** 85.

Detecting spin: **misleading reporting**

- Selective reporting
- Misleading description of study design
- Use of linguistic spin
- **No adverse events reported/lack of focus on harm (even if very efficacious, no take up if bad side-effects/very dangerous)**

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Detecting spin: **misleading reporting**

- Selective reporting
- Misleading description of study design
- Use of linguistic spin
- No adverse events reported/lack of focus on harm
- **No consideration of the limitations (eg, not accounting for confounding variables, biases in study design)**

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Detecting spin: **misleading reporting**

- Selective reporting
- Misleading description of study design
- Use of linguistic spin
- No adverse events reported/lack of focus on harm
- No consideration of the limitations
- **Selective citation of other studies (eg, only previous studies concordant with the current study findings are acknowledged, see EXAMPLE)**

Lazarus C, Haneef R, Ravaud P, Boutron I. **Classification and prevalence of spin in abstracts of non-randomized studies evaluating an intervention.** *BMC Med Res Methodol* 2015; **15:** 85.

Detecting spin: **misleading reporting**

- Example of **selective citation of other studies**

"It would be interesting to know its efficacy and safety in correcting high myopic astigmatism and how it changes the shape of the cornea."

Several publications already exist in this field on this particular topic.

Lazarus C, Haneef R, Ravaud P, Boutron I. **Classification and prevalence of spin in abstracts of non-randomized studies evaluating an intervention.** *BMC Med Res Methodol* 2015; **15:** 85.

Detecting spin:

inadequate interpretation and extrapolation

- **Claim an effect for non-statistically significant results (see EXAMPLE)**

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Detecting spin:

inadequate interpretation and extrapolation

- Example of a study **claiming an effect for non-statistically significant results**

"The use of [Automated CardioPulmonary Resuscitation] A-CPR resulted in a higher rate of survival to hospital compared with [Conventional CardioPulmonary Resuscitation] CPR"

This was a retrospective study involving 66 patients for which the propensity score adjusted odds ratio was 1.69 [95% CI 0.79–3.63].

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Detecting spin:

inadequate interpretation and extrapolation

- Claim an effect for non-statistically significant results
- **Claim of a significant difference despite lack of statistical test (no meaningful interpretation can be made)**

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Detecting spin:

inadequate interpretation and extrapolation

- Claim an effect for non-statistically significant results
- Claim of a significant difference despite lack of statistical test
- **Causal language or causal claim (many study designs do not allow causality to be established)**

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Detecting spin:

inadequate interpretation and extrapolation

- Claim an effect for non-statistically significant results
- Claim of a significant difference despite lack of statistical test
- Causal language or causal claim
- **Focus on statistical significance instead of clinical relevance (see EXAMPLE)**

Lazarus C, Haneef R, Ravaud P, Boutron I. **Classification and prevalence of spin in abstracts of non-randomized studies evaluating an intervention.** *BMC Med Res Methodol* 2015; **15:** 85.

Detecting spin:

inadequate interpretation and extrapolation

- Example of a study **focusing on statistical significance instead of clinical relevance**

"While the [Clinical Global Impression-Schizophrenia] CGI-SCH overall score improved in both groups after switching, there was a significantly greater change in those who switched from olanzapine (difference of 0.29 points, p=0.013)"

The CGI-SCH scale range from 0 to 7.

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Detecting spin:

inadequate interpretation and extrapolation

- Claim an effect for non-statistically significant results
- Claim of a significant difference despite lack of statistical test
- Causal language or causal claim
- Focus on statistical significance instead of clinical relevance
- **Inadequate implication for clinical practice (authors recommend the use of the intervention for clinical practice – weak/observational data)**

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Detecting spin:

inadequate interpretation and extrapolation

- Claim an effect for non-statistically significant results
- Claim of a significant difference despite lack of statistical test
- Causal language or causal claim
- Focus on statistical significance instead of clinical relevance
- Inadequate implication for clinical practice
- **Inadequate extrapolation to larger population, intervention or outcome (see EXAMPLE)**

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Detecting spin:

inadequate interpretation and extrapolation

- Example of **inadequate extrapolation to larger population, intervention or outcome**

"This intervention approach has the potential to impact on the progression of colorectal cancers and other cancers or chronic diseases."

The intervention focused on colorectal cancers only.

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Misleading reporting: solutions

- Endpoints match in protocol, Methods, and Results
- Accurate study descriptor in (non-declamatory) title
- Avoid overly descriptive/poetic language
- Ensure adverse events are reported both in Abstract and table of (graded) adverse events in the text
- Ensure limitations of study are described
- Ensure authors have discussed their results in the context of all previous evidence (eg, *Lancet* Research in Context panel)

Misleading reporting: solutions

THE LANCET

Lancet 'Research in context' panel

Panel: **Research in context**

Evidence before this study

This section should include a description of all the evidence that the authors considered before undertaking this study. Authors should state: the sources (databases, journal or book reference lists, etc) searched; the criteria used to include or exclude studies (including the exact start and end dates of the search), which should not be limited to English language publications; the search terms used; the quality (risk of bias) of that evidence; and the pooled estimate derived from meta-analysis of the evidence, if appropriate.

Added value of this study

Authors should describe here how their findings add value to the existing evidence (including an updated meta-analysis, if appropriate).

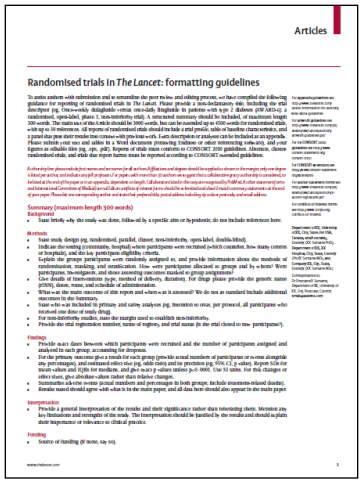
Implications of all the available evidence

Authors should state the implications for practice or policy and future research of their study combined with existing evidence.

Research in context panels should not have references; anything mentioned that needs referencing should appear in the main text.

Misleading reporting: solutions

- Complies with published guidelines
  - CONSORT **(randomised trials)**
    - CONSORT for Abstracts
  - *STROBE* **(observational studies)**
  - PRISMA **(meta-analyses)**
  - CARE (case reports), STARD (diagnostic), among others (see EQUATOR network)
- *Lancet* reporting guidelines



Articles

Randomised trials in *The Lancet*: formatting guidelines

Inadequate interpretation and extrapolation: solutions

- Statistics to back up results? – if not no direct interpretation can be made
- Check study design – can you establish cause and effect?
- Interpreting statistical significance: p=0·05 is a well established but arbitrary cutoff for statistical significance. p=0·051 is just as valid as 0·049 at proving “significance” of an intervention.

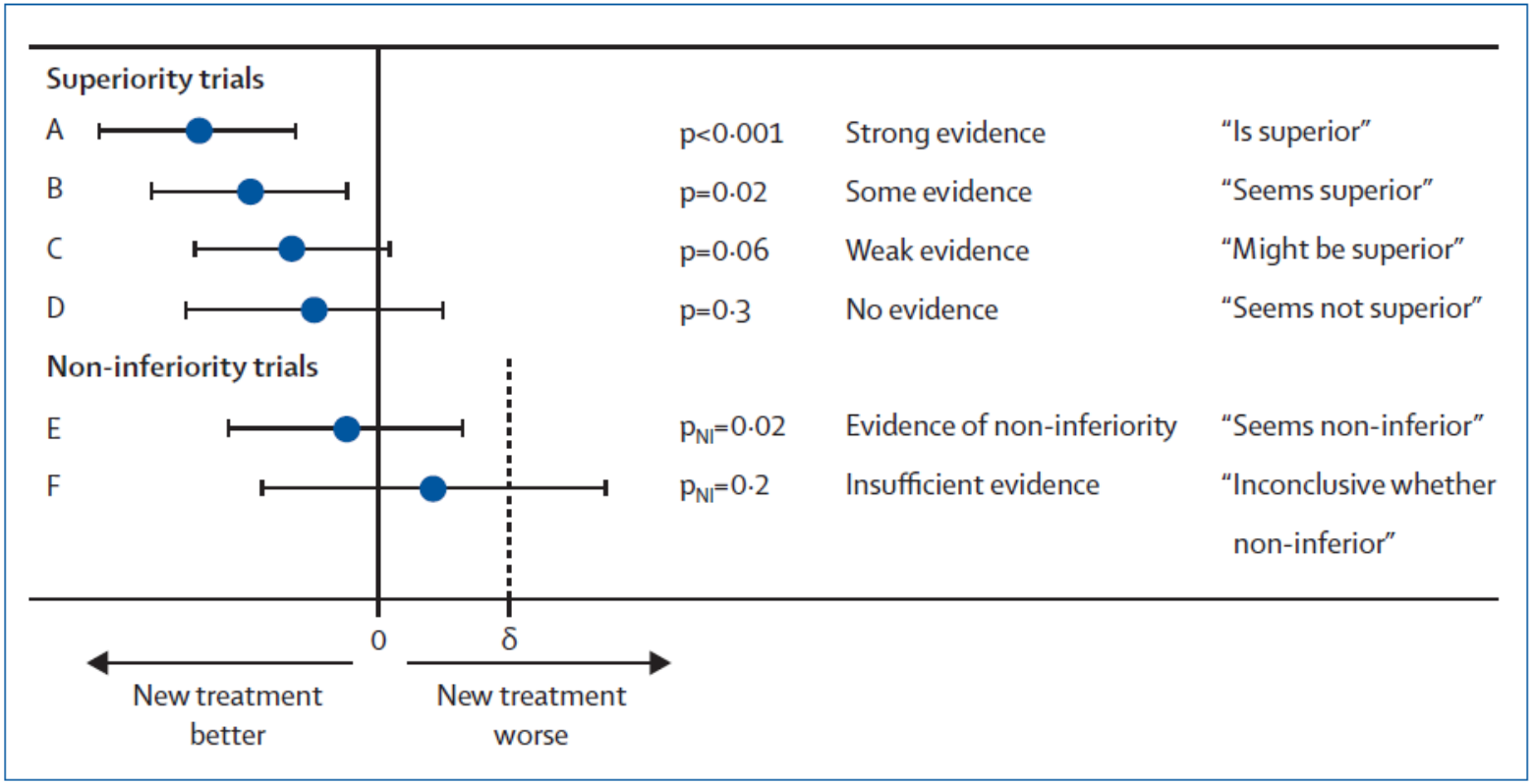
Inadequate interpretation and extrapolation: solutions

THE LANCET

Translating statistical findings into plain English

Stuart J Pocock, James H Ware

Published Online: 16 April 2009



Pocock SJ, Ware JH. **Translating statistical findings into plain English.** *Lancet* 2009; **373:** 1926–28.

Negotiating with authors

Before proof is sent to author

- Major changes should have been negotiated before accepting the article
- Only accept subject to changes made during editing
- Pre-warn authors of the level of editing
- Be polite/mindful in author queries – provide justification for changes
- Senior/peer-review editor should check all queries before they go to the author

Negotiating with authors

Once proof is sent to author

- Be open-minded: come to a compromise
- Defer major problems to senior/peer-review editor
- Journal can still delay or refuse publication, or re-peer-review at this stage

JULIE WAS EXCITED WHEN HER DAUGHTER FAILED HISTORY. AT LAST A TEACHABLE MOMENT ON THE NEED FOR UNBIASED CONSIDERATION OF ***ALL*** THE EVIDENCE!