CREATING A CULTURE OF PUBLICATION INTEGRITY TOGETHER

Dr Trevor Lane, COPE
Forum on good publication practices
University of Macau, 2 December 2022
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Affiliations
• Trustee & Council Member, Committee on Publication Ethics
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• Education Consultant, AsiaEdit

Good publication practices

Acknowledgement: Some slides in this presentation are based on previous COPE presentations: eg1, eg2, eg3, eg4, eg5

https://publicationethics.org/about/council/trevor-lane
CREATING A CULTURE OF PUBLICATION INTEGRITY TOGETHER: From ‘Publish or Perish’ to ‘Publish and Nourish’

Agenda

• About COPE
• Research & publication culture:
  o Publish or perish?
  o Publish and flourish?
  o Publish and nourish
• Authorship issues
ABOUT COPE

• Non-profit established in 1997; operated, managed, and governed by a small group of paid employees, with volunteers on the Trustee Board and Council.

• >13,500 members from 97 countries:
  o primarily editors of scholarly journals; also:
  o universities and research institutes
  o associated individuals and companies (including editorial and publishing support services)

• COPE brings together all those involved in scholarly research and its publication to strengthen the network of support, education, and debate in publication ethics:
  *Creating a culture of publication integrity together*
COPE PURPOSE

Educate and advance knowledge in methods of safeguarding the integrity of the scholarly record.

COPE VISION

To create a future in which ethical practice in scholarship is the cultural norm.

OUR MISSION

COPE’s mission is built around three core principles:

SUPPORT
Providing practical resources to educate and support our members

LEADERSHIP
Providing leadership in thinking on publication ethics

VOICE
Offering a neutral, professional voice in current debates
COPE ACTIVITIES & RESOURCES

- 100+ Forums (members only) held since 1997; 648 cases with advice on COPE’s website
- Flowcharts: step by step guides
- Guidelines: formal policy documents
- Community discussions & discussion documents on emerging issues
- Webinars and videos of COPE speakers at events
- COPE seminars (members only) held globally
- Joint founder of Principles of Transparency and Best Practice in Scholarly Publishing
- eLearning (members only)
Policies and core practices required to reach the highest standards in publication ethics:
Systematic manipulation of the publication process


Also see:
COPE Webinar 2022: Managing paper mills
RESEARCH & PUBLISHING LANDSCAPE

Stakeholders: Agencies, governments, ministries, funders, sponsors, societies, companies, publishers, institutions, professions, practitioners, researchers, general public…

Different sectors, disciplines… (macro to micro scales)

- Research Ecosystem
- Research Environment
- Research Community

Institutions, faculties, departments, labs…

Situation, structure, infrastructure…

- Research Culture (why things happen)
- Research Climate ([perception of] what happens)

Values, practices, policies, protocols, procedures…

Motivations, incentives

Performance & behaviours

Publish or perish; publish or punish

- **Quantity** > quality
- **Publication** as proof of research, basis of rankings
- **Publication** as job performance / productivity
- **Publication** to get/keep job, get promoted...
- **Prestige** / reputation / impact factor of journal reflects on institution / researcher / research

Publish and perish

- **Poor quality**: poor choice of publication venue: nobody reads/cites
- **Publication** might prevent **patenting**
- **Retractions**:
  - Systematic carelessness or disinformation (inc. biased/selective citations, fake references/quotes)
  - Unethical practices

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- **Authorship issues**: hiding **sponcon** (sponsored content), conflicts of interest
- **Salami slicing**: (least publishable units)
- **Duplicate/redundant publications**, multiple submissions
- **Research misconduct** (FFP: fabrication, falsification, plagiarism)
- **Questionable / detrimental research practices**; grant fraud
- **Predatory journals / conferences** (CON-ferences); nonsense/fake/plagiarised papers

But see: ThinkCheckSubmit.org, ThinkCheckAttend.org
• Journal impact factor for job performance / productivity / quality

• Lists of prestigious journals for performance, job/promotion, prizes, bonuses

• Article citations, authorship position for job performance / productivity / quality

• Highly cited researcher rankings & awards

• Alternative metrics

• Wider dissemination of articles (Open Access)

• Funders recognise posting of results in preprints

• Encouragement of social networks/media, post-publication discussion & debate

• Questionable/predatory editorial & publishing support services

• Fake peer review rings; fake journal special issues

• Citation manipulation
  ▪ Excessive author/journal self-citation
  ▪ Honorary/mutual citations
  ▪ Coerced/coercive citations
  ▪ Journal citation stacking, cartels/rings

• Social media manipulation, inc. fake accounts/activity

• Paper mills, authorship for sale

But see: San Francisco Declaration on Research Assessment
https://sfdora.org/

publicationethics.org
PUBLISH AND NOURISH

• **Quality** > quantity
• **Transparency**, access (Open Research/Science); publish **negative** results
• **Peer review** > metrics; narrative CV > publication lists
• Variety of **sharable research outputs** (data, protocols)
• **Access** to code & raw data: Open Data; **FAIR** Principles (Findable, Accessible, Interoperable, and Reusable)
• **Wider** access (plain language summaries, infographics, video abstracts, graphical abstracts, translations)
• **Knowledge exchange / transfer** as third mission; **research impact** as direct/indirect societal (non-academic) impact added to university/national assessments
• **DEI** (diversity, equity, inclusion) or **IDEA** (inclusion, diversity, equity, accessibility)...

*Do good as well as do well*
SOME RESEARCH & PUBLICATION PROBLEMS

- Reproducibility (repeat analysis)
- Replicability (repeat study)
- Generalisability

- Screen, detect, verify raw/original data
- Respond to allegations, investigate with institution
- Correct/retract, inform institution of misconduct
- Educate, support, train, prevent

Questionable Research Practices (QRP)
- Unauthorized data collection / use
- Underpowered, faulty methods
- Sampling / confounder bias
- Extending, ending early, censoring
- Cherry picking
- Fishing
- Trawling, dredging
- P hacking
- HARK

Questionable Publishing Practices (QPP)
- Poor record keeping / reporting
- Image distortion, exaggeration
- Misinterpretation, spin
- Unauthorized publication / sharing
- Hiding, withholding data / info
- Supporting predatory journals
- Salami slicing
- Redundant / duplicate publication
- Selective publication, file drawer problem
- Not correcting errors

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Authorship matters

- Record of attribution
- Moral and legal rights
- Responsibility for (your/all) content
- Accountability in investigations
- Shapes academic career
  - Expertise & track record
  - Collaborations, networks
  - Funding, awards, hiring, promotion
- Individual / institutional reputation

Of 134 authorship cases brought to COPE Forum up to 2019:

- questionable changes to author list after submission (27%)
- ghost, guest, or gift authors (19%)
- submission without knowledge of one or more authors (19%)
- disputed author order (7%)
- forged paperwork (7%)

- often involves other problems (duplication, salami slicing, IP theft, conflicts of interest)

ORCID

https://orcid.org/

WHOSE BYLINE IS IT ANYWAY?

“Author-A et al (2022) reported that…”

Journal Name, July 2022 (Vol 7)

Journal article title

A Author, B Author, C Author, D Author, E Author, F Author

Lead author/writer? Guarantor? Corresponding author?

Corresponding author?
(Administrative task before/after publication)

Amount of work? Value of contribution? Equal contribution?
Alphabetical order? Reverse alphabetical order?
Random order?
Explain in footnote

Senior author? Group head? Guarantor? Corresponding author?

publicationethics.org
Combined Measurement of the Higgs Boson Mass in pp Collisions at √s = 7 and 8 TeV with the ATLAS and CMS Experiments

G. Aad et al. (ATLAS Collaboration) (CMS Collaboration)

(Received 25 March 2015; published 14 May 2015)

A measurement of the Higgs boson mass is presented based on the combined data samples of the ATLAS and CMS experiments at the Tevatron LHC in the H → γγ and H → ZZ → 4ℓ decay channels. The results are obtained from a simultaneous fit to the reconstructed invariant mass peaks in the two channels and for the two experiments. The measured masses from the two experiments and the measurements used for the fit are found to be consistent among themselves. The combined measurement of the Higgs boson mass is m_H = 125.09 ± 0.21 (stat) ± 0.11 (syst) GeV.

DOI: 10.1103/PhysRevLett.114.191803

5,154 authors
Can’t live without my FB, LoL: The influence of social networking sites on the communication skills of TESL students

Shakirah Hanani Abd Rahman

ICLALIS 2013

Abstract

It is getting common to see two or more people sitting together at a café but not talking to each other-they are occupied with their smartphones, tablets or laptops to browse through social networking sites (SNS) like Facebook, Twitter, etc. Virtual communication seems to be more favourable to certain people as compared to

https://cyberleninka.org/article/n/158538.pdf

Exploring entrepreneurial readiness of youth and startup success components: Entrepreneurship training as a moderator

Sein Azeez Olyubola

Faculty of Economics & Management, Universiti Sains Islam Malaysia, 71100 Kedah Barat, Malaysia

Abstract

This study explored the entrepreneurial readiness of youth in terms of perceived entrepreneurial self-efficacy, social, cognitive, and environmental factors. Results indicate that entrepreneurial readiness of youth can be improved through entrepreneurship training.
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<td><strong>1)</strong> Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND <strong>2)</strong> Drafting the work or revising it critically for important intellectual content; AND <strong>3)</strong> Final approval of the version to be published; AND <strong>4)</strong> Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.</td>
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<td><strong>1)</strong> Each author is expected to have made substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data; or the creation of new software used in the work; OR have drafted the work or substantively revised it; <strong>2)</strong> AND to have approved the submitted version (and any substantially modified version that involves the author’s contribution to the study); <strong>3)</strong> AND to have agreed both to be personally accountable for the author’s own contributions and to ensure that questions related to the accuracy or integrity of any part of the work, even ones in which the author was not personally involved, are appropriately investigated, resolved, and the resolution documented in the literature.</td>
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ICMJE ([www.icmje.org](http://www.icmje.org))

Contributors who meet fewer than all 4 of the above criteria for authorship should not be listed as authors, but they should be acknowledged. Examples of activities that alone (without other contributions) do not qualify a contributor for authorship are acquisition of funding; general supervision of a research group or general administrative support; and writing assistance, technical editing, language editing, and proofreading…

…obtain written permission to be acknowledged from all acknowledged individuals.
UNDERLYING PROBLEMS?

• **General**
  - Differences in authorship criteria, weighting, thresholds in groups, institutions, journals?
  - Who did what & quality/quantity, record keeping, proof, relative importance?
  - Perceived differences in author order & importance of corresponding author (joint first authors, joint corresponding authors)?

• **Institutional**
  - What happens when authors leave institutions during drafting / submission?
  - No / unclear policies on IP, data, thesis management (eg, student excluded from paper)?
  - Power relations; students versus supervisors / heads (eg, supervisor added to paper)

• **Credit & appraisal systems**
  - Institutions’ publication-based rules for hiring, promotions, awards, graduation
  - Institutions’ reliance on journal impact factor (JIF), authorship position/type, metrics, quantity>quality
  - Other assessments using JIF/citations: funder / government / world rankings
UNETHICAL OR FRAUDULENT AUTHORSHIP?

Gift authorship, eg, for funding, technical service, data/materials, supervision, artwork

Guest authorship (name dropping of key opinion leaders, +/- permission)

Coerced/coercive authorship

Ghost authorship (missing from byline)

Questionable authorship practices, eg, reciprocating gift/guest authorship, paying, bartering, relinquishing authorship (demoting author to acknowledgements = ghost author)

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UNETHICAL OR FRAUDULENT AUTHORSHIP?

- Fake / false authorship
- Forged co-authorship
- Publication not authorised

Plagiarism of text/data [& author services to “remove plagiarism”; contract cheating to write/research]

• National guidelines
  China Association for Science and Technology 5 Don’ts (2015). **DO NOT:**
  (1) Ask someone else to write the manuscript
  (2) Ask someone else to submit your article
  (3) Ask someone else to revise the research content
  (4) Give false reviewer information or manipulate peer review
  (5) Violate ethical standards and responsibility required of manuscript authors

See: RetractionWatch

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UNETHICAL OR FRAUDULENT AUTHORSHIP?

- Using a paper mill to write/submit fake or plagiarised/translated paper
- Using a paper broker to add your / other’s name
- Knowingly publishing in predatory journal

“…the process by which manufactured manuscripts are submitted to a journal for a fee on behalf of researchers with the purpose of providing an easy publication for them, or to offer authorship for sale”

https://cope.oni/paper-mills

STM Integrity Hub

https://publicationethics.org/resources/research/paper-mills-research

https://publicationethics.org/resources/discussion-documents/predatory-publishing

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UNETHICAL OR FRAUDULENT NON-AUTHOR CONTRIBUTORSHIP?

- Guest contributorship
- Fake / false contributorship
- Coerced/coercive contributorship
- Ghost contributorship
- Ghost writer
- Ghost editor
- Ghost proofreader
- Ghost translator
- Questionable contributorship practices, eg, reciprocating guests, paying, bartering
- Forged contributorship
- Contribution not authorised

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• 21% of articles in 6 medical journals in 2008 had undeserved +/- ghost authors (https://www.bmj.com/content/343/bmj.d6128)

• 41% of first-authors of Cochrane reviews, 2016-2018, reported gift authorship (https://doi.org/10.1016/j.jclinepi.2020.08.004)

• 35.5% of respondents reported adding an undeserving author (https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0187394)

• Misrepresentation, impersonation; usually plagiarism; could be grant/funding fraud

• Unjustified authorship is considered research misconduct in South Korea (Nature News 12 Nov 2019: More South Korean academics caught naming kids as co-authors, https://www.nature.com/articles/d41586-019-03371-0)

1. **Research appraisal** systems:
   - quality > quantity; use of peer review
   - limits on # publications; no JIF in CV; ‘narrative’ CV, multiple output types
   - evaluate contributions to research integrity, impact, ‘stewardship’

2. **Institutions** (eg, central & faculty/discipline):
   - predict & prevent problems: training & policies/agreements/forms on authorship / contributorship roles, IP (copyright, patents)
   - record all roles (eg, CRediT system); scoring charts
   - keep Tracked copies, notebooks
   - dispute resolution procedures, research integrity officer / advisor

3. **Journals**:
   - clear authorship & contributorship guidelines & criteria
   - record & publish author roles; explain order; equal authors allowed?
   - forms for author transparency, CoI
   - correspond with all authors
   - guidelines on allegations & authorship dispute, inc. publication/process management
   - open peer review vs anonymised review? publish peer reviews?
   - post-publication review/discussion & amendments
The Contributor Roles Taxonomy’s 14 roles and best practices represent a simple but comprehensive system that enables the range and nature of contributions to scholarly published output to be captured in a transparent, consistent, and structured format.

- Conceptualization
- Data curation
- Formal analysis
- Funding acquisition
- Investigation
- Methodology
- Project administration
- Resources
- Software
- Supervision
- Validation
- Visualization
- Writing – original draft
- Writing – review & editing
Discuss, agree, record before each project/paper
- Document contributions
- Follow publication authorship criteria
- Discuss throughout project/paper
- Review & approve final paper

https://ori.hhs.gov/infographics
INTERNATIONAL GUIDELINES & INITIATIVES

RePAIR Guidelines (Responsibilities of Publishers, Agencies, Institutions, and Researchers in Protecting the Integrity of the Research Record)
CLUE Guidelines (Cooperation & Liaison between Universities & Editors)
COPE Guidelines: Cooperation between research institutions and journals on research integrity cases

Hong Kong Principles for Assessing Researchers
https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000737
https://wcrif.org/guidance/hong-kong-principles

Leiden Manifesto for Research Metrics
http://www.leidenmanifesto.org/

Singapore Statement on Research Integrity
https://wcrif.org/statement

Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations
https://wcrif.org/montreal-statement/file

San Francisco Declaration on Research Assessment
https://sfdora.org/
- recognises the need to improve the ways in which researchers and the outputs of scholarly research are evaluated.
CREATING A CULTURE OF PUBLICATION INTEGRITY TOGETHER

CREATING A CULTURE OF PUBLICATION INTEGRITY TOGETHER

Setting research hypotheses or directions
Treatment of research participants
Gathering data or information
Analysis and interpretation
Reporting of methods and results
Making findings available

CREATING A CULTURE OF PUBLICATION INTEGRITY TOGETHER

- Editors of scholarly publications
- University & research institutes
- Associated individuals/companies

**Common**
- Honesty
- Scrupulous care
- Transparency
- Care and respect
- Stewardship of scholarship for future generations

**Research Integrity**
- Setting research hypotheses or directions
- Treatment of research participants
- Gathering data or information
- Analysis and interpretation
- Reporting of methods and results
- Making findings available

**Publication Ethics**
- Developing editorial policies
- Managing the publication process
- Making editorial decisions
- Investigating and taking action to maintain and correct the scholarly record
- Preserving the scholarly record

[https://publicationethics.org/sites/default/files/research-publication-ethics-training.pdf](https://publicationethics.org/sites/default/files/research-publication-ethics-training.pdf)
THANK YOU

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