



Using APA style for scientific communication (Session 4)

Sebastian Jentschke

(upgrading slides by Sieghard Beller, Marco Hirnstein, and others)





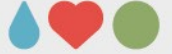
Overview

- Why publishing? Why a rule system?
- structure
- language use
- mechanics of style: period (.), comma, abbreviations, parentheses, etc.
- figures and tables – some practical hints
- referencing
- your term papers
- publication process
- ethical issues (authorship, consent, plagiarism)





Your term papers



Your term papers

information sources:

- general info meeting
- start-up meeting with supervisor

things to decide

- type: empirical, review, theoretical

things to have in mind

- time: milestones, deadlines
- products: presentation, paper

**find out what
is expected**

**select topic
(takes time)**

**search for
literature**

**do the
main work**

**start writing
first draft**

**review and
rewrite**



Your term papers

five typical errors:

- not interesting
- too easy
- too difficult
- not enough literature
- too broad

(e.g., “Freud’s theory of personality and abnormal behaviour” → well-defined: “Freud’s theory of oedipal conflict applied to mental health”)

find out what
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**select topic
(takes time)**

search for
literature

do the
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start writing
first draft

review and
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Your term papers

information sources:

- literature list / pensum
- library, oria.no
- databases: Web of Science, PsycINFO, PubMed, (Google Scholar, Internet ...)
- articles and books

things to have in mind

- source credibility (peer reviewed, journal type)?
- up-to-date or out-dated? – but: classic works?
- representative (WASP, psychology students, etc.)?
- coverage?

find out what
is expected

select topic
(takes time)

**search for
literature**

do the
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Your term papers

needs...

- time → work
- planning → time schedule
- coordination and communication → group, supervisor
- decisions → variables etc.
- documentation → decisions, material, findings, ...
- feedback → supervisor

find out what
is expected

select topic
(takes time)

search for
literature

**do the
main work**

start writing
first draft

review and
rewrite



Your term papers

*writing in teams is **challenging for experts too!***

- strategy: “divide and conquer”
- challenges: planning and coordination, group interaction
- problem: lack of coherence in language, style, etc.
- solution: circulate in the group, review, and re-write (several rounds), ask supervisor for feedback

find out what
is expected

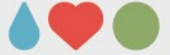
select topic
(takes time)

search for
literature

do the
main work

**start writing
first draft**

**review and
rewrite**



Your term papers

General tips

- *audience*: write for other students, not for experts and ask yourself: “Will the reader understand why this paragraph is included?”
- use *technical terms* only when everyday terms are not appropriate; explain them (if not well known in your field)
- provide *all necessary information*; nothing should be implicit
- if something is *worth mentioning*, explain and spend time on it

Scientific style

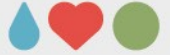
- explicit, objective, reader friendly, *interesting language*
- unemotional, unprejudiced and *non-tendentious language*
- use neither too formal nor too informal language
- *place yourself in the background*; it is ok to write “I” or “we” but focus on what you are saying/writing, not on you as a person





Your term papers





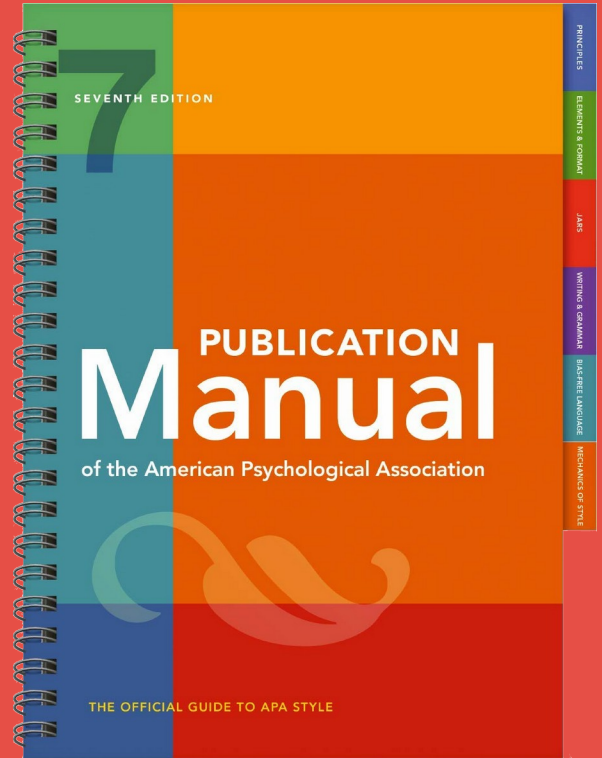
Your term papers

Some general tips how to learn APA-style:

- *focus on the systematic parts first:*
references, paper format, headings, document structure
- *learn the nitty-gritty bits (mechanics of style), stepwise*
- *let software do the heavy lifting:*
reference management, use templates
- *use available web resources:*
apastyle.apa.org, zbib.org



Publication process *Chapter 12*





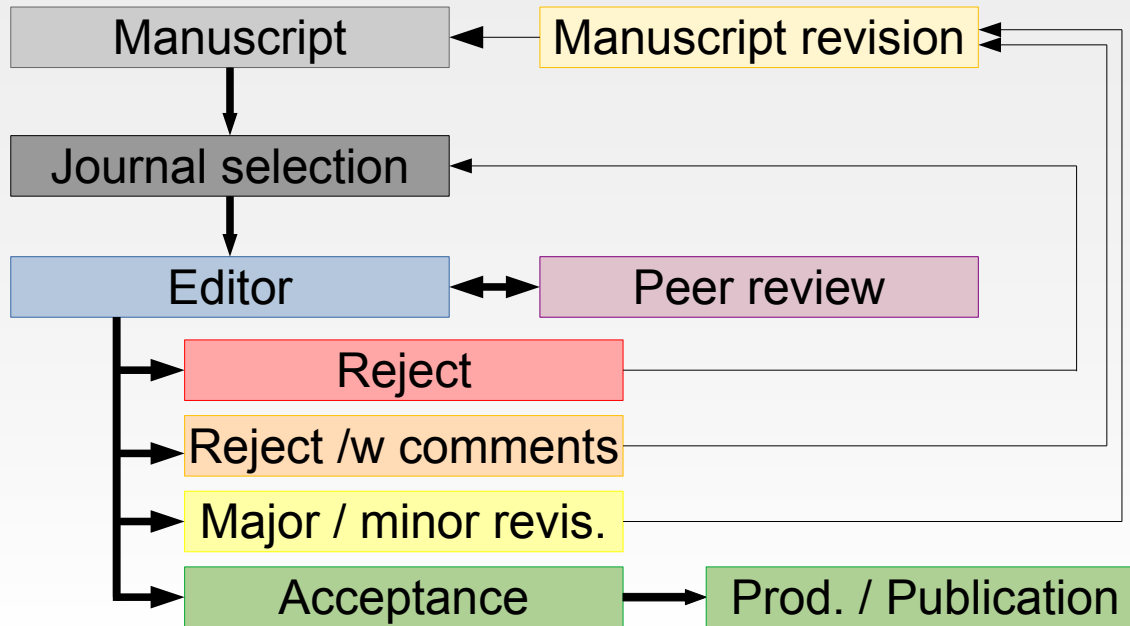
Manuscript submission: Checklist

- Format: check (a) journal's website, (b) APA manual
- Title page and abstract
- Title: How many words are permitted?
- Authors and institutions correct?
- Abstract: How many words? Clear and concise?
- Headings: Levels correct?
- Paragraphs: >1 sentence and <1 page?
- Abbreviations: Necessary? Explained?
- Statistics: All non-Greek symbols in italics?
- References: Complete, correctly formatted?
- Tables and figures: numbered and formatted correctly?
- Copyright and quotations: © note, page numbers etc.?





Publication process



Criteria for journal selection:

Research:

topic
quality
novelty

Journal:

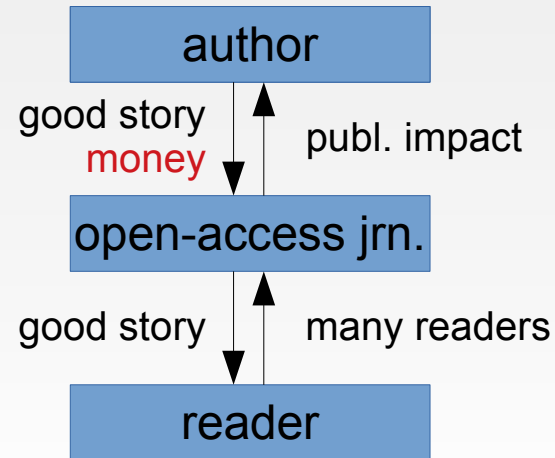
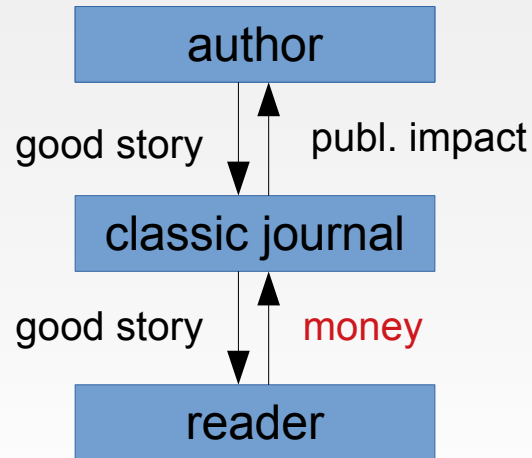
status / impact
audience
length / style rules
«publication lag»





Publicat.: Classic vs. open access

trend towards open access publishing → research is available not only to those who can afford journal subscriptions



reader is less important as long as authors pay
→ predatory open access journals





Publication: Predatory journals

- **accepting articles quickly** with little or no review or quality control, including hoax and nonsensical papers
- **aggressively campaigning** for academics to submit articles or serve on editorial boards
- **listing academics as members of editorial boards without their permission** or appointing fake academics to editorial boards
- **mimicking** the name or web site style of **established journals**
- notifying academics of **article fees** only **after papers are accepted**
- **fake impact factors**

<https://predatoryjournals.com/journals/>





Publication process: Peer review

Goal: ensure that work is original and valid

- discussion among colleagues (confidential)
- “action editor” responsible for both content and quality of the journal

Reviewers

- assist the editor (who makes the decision)
- are chosen according to expertise, familiarity with a field/topic, balance of perspectives ...
- are expected to respond in appropriate time
- identity often concealed from the authors

Types

- unmasked: Authors' identity revealed to reviewers
- masked: Authors' identity concealed from reviewers





Publication process: Peer review



WWW.PHDCOMICS.COM





Publication process: Rejection

Common causes:

- work outside the coverage of the journal
- work contains flaws in design, method, interpretation
- work regarded as making only a limited novel contribution
- too many manuscripts submitted to the journal

Rejection with invitation to revise & resubmit...

- most manuscripts have to be revised!
- manuscript has potential, but not ready for submission
- editor provides assessment and reviewers' comments (reviews)
- revision does not guarantee acceptance; it should be accompanied by responses to the reviewers (revision note)





Publication process: Acceptance

Production phase:

- no further changes (except for copy-editing)
- transfer of copyright (unless open access), permission, online material etc.
- copy-editing by the journal → proofs
- proof reading and response
- (early) online publication
- (publication in print)





Publication: Author responsibilities

Quality

- use the spell-checker and (if necessary) language editing services
- seek expert assistance (proof reading by coauthors and colleagues)
- follow APA standards → looks professional

Format

- APA standard → enhanced clarity, readability
- Type face: Times New Roman 12 pt; *Arial*, 11 pt; *Calibri*, 11 pt; *Lucida Sans Unicode*, 10 pt; and *Georgia*, 11 pt
- Line spacing: Double-space
- Margins: Uniform, at least 2.5 cm (top, bottom, left, right)
- Manuscript pages: title page + declarations (p. 1), abstract (p. 2), text (from p. 3), references, tables, figures, appendices (start each on a separate page); supplementary materials: if necessary (in separate files)





Publication: Author responsibilities

Transfer of copyright

- copyright owner: publisher (classic) vs. author (open access)
- authors permit publishers (a) to distribute the work, and (b) to control re-use by others (reprint ...)
- publishers may permit authors to reuse their work, e.g. for teaching or self-archiving (posting articles on the own web page) → check publisher's policy



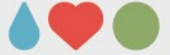


Publication: Author responsibilities

Working with the publisher

- preparation of files for copy-editing: check styles and formats for figures etc.
- review the proofs (type-setted paper): typically within 2 working days; deal with questions from the typesetter; only minimal changes allowed
- responsibilities of the corresponding author:
 - heading levels correct?
 - numbers and symbols correct?
 - figures and tables okay?





Publication ethics: Overview

Ethical and legal requirements:

- authorship and author contributions
- approval: ethical review boards, informed consent from participants, and research permission for foreign countries
- conflicts of interest: financial agreements, affiliations with products and services mentioned in the paper...

Author contributions

Conceived and designed the experiments: SK. Performed the experiments: SK. Analyzed the data: SK SJ JE. Contributed reagents / materials / analysis tools: SJ. Wrote the paper: SK SJ.

Ethics statement (under Methods → Participants)

Written informed consent was obtained, the study was approved by the ethics committee of the University of Leipzig, and conducted according to the guidelines of the Declaration of Helsinki.

From: Koelsch, S., Enge, J., & Jentschke, S. (2012). Cardiac signatures of personality. *PLoS One*, 7(2), Article e31441. <https://doi.org/10.1371/journal.pone.0031441>



Publication ethics: Authorship

“Authorship is reserved for persons who make a substantial contribution to and who accept responsibility for a published work.” (*APA Publication Manual, 2020, p. 24*)

“Psychologists take responsibility and credit, including authorship credit, only for work they have actually performed or to which they have substantially contributed.”

“Publication credits reflect the relative scientific contributions of the individuals involved, regardless of their relative status.”

“Mere possession of an institutional position, such as department chair, does not justify authorship credit.”

“Minor contributions to the research or to the writing for publications are acknowledged appropriately, such as in footnotes or in an introductory statement.”

American Psychological Association (2017). *Ethical principles of psychologists and code of conduct*. <https://www.apa.org/ethics/code/index>





Publication ethics: Authorship

Substantial scientific contribution and writing:

- formulating the problem / hypothesis
- structuring the experimental design
- organizing or conducting the statistical analysis
- interpreting the results
- writing a major proportion

Supportive functions:

- designing or building the apparatus
- suggesting or advising on analysis
- recruiting participants, conducting routine observations, collecting or entering the data
- modifying a computer program
or for simply being the boss





Publication ethics: Authorship

Problems with publication pressure:

- increasing number of journals and papers
- increasing number of authors per paper and gift / guest / ghost authors
- increasing number of “predatory” journals

Order of authors and authors’ responsibilities

- first author is main contributor; the order of the remaining authors reflects their relative contributions
but: relative contribution → conflicts among authors → fairness?
- every single author is responsible for the content of an article
but: responsibility for quality and integrity varies among authors; dilemma if co-author is ‘unaware’





Publication ethics: Informed consent

Obligation to inform participants and to obtain informed consent:

- participation is voluntary and participants have the right to withdraw without consequences
- participants must be given a reasonable understanding of the purpose of the study, consequences, funding; exemptions (e.g., deception, giving incomplete information) must be justified by the value of the research and the lack of alternatives

Children

- are individuals under development; adapt methods if needed
- parental consent is usually required under the age of 15
- childrens' consent is required if old enough to express opinion
- age-specific information





Public. ethics: Retaining and sharing

Respect privacy, confidentiality, and restrict re-use

- confidentiality in creating, storing, accessing, transferring, and disposing of data
- all materials (e.g., instructions, data, analyses) are expected to be retained for at least 5 years after publication
- the data on which the results are based should not be withhold / be shared

Personal data

- must be anonymised;
- relevant aspects: health status, religion, sexual orientation etc.
- **participants** are **entitled** to **check** whether confidential information is accessible
- **data collected** for one purpose **cannot be used for other purposes** (new consent is needed)
- personal data should **not** be **stored longer than necessary**





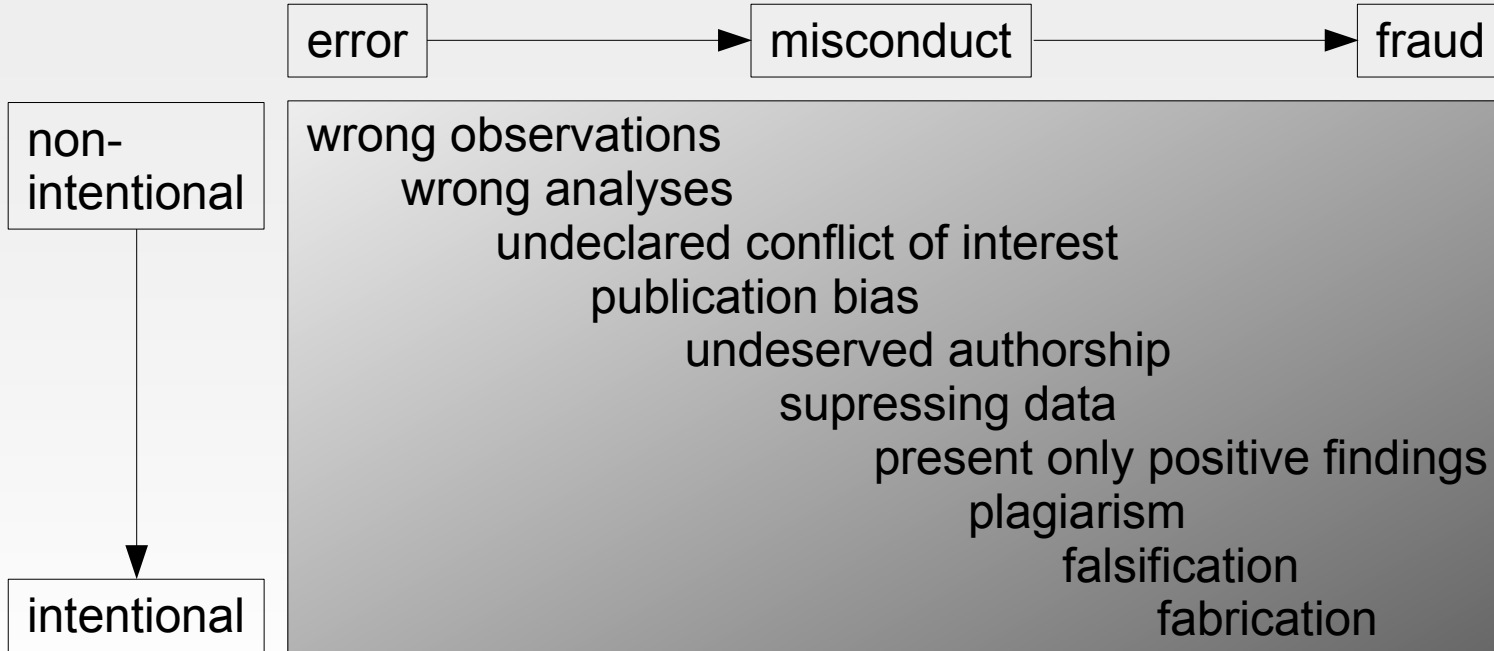
Publication ethics: Use of data

- **no duplicate publication:** do not publish – as original data – data that have been previously published (this includes results that are part of, or significantly overlap with, other publications but does not preclude republishing data when they are accompanied by proper acknowledgement)
- **no slicing of publications:** do not split up a coherent block of results in order to get more papers out (e.g., from large-scale, longitudinal, or multi-disciplinary projects)
- **no publicity in advance:** do not make results public before they have been scrutinized by the scientific community (accepted for publication, presented at a conference).





Publication ethics: Errors (and more)



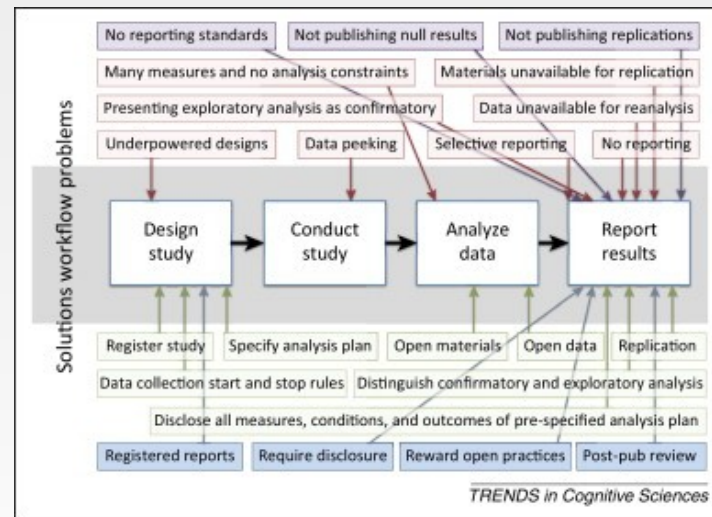


Publication ethics: Errors (and more)

Publication and selective reporting biases:

- study publication bias (“file drawer” problem) including time-lag bias
- selective outcome reporting bias
- selective analysis reporting bias

Ioannidis, J. P. A., Munafò, M. R., Fusar-Poli, P., Nosek, B. A., & David, S. P. (2014). Publication and other reporting biases in cognitive sciences: detection, prevalence, and prevention. *Trends in Cognitive Sciences*, 18(5), 235-241. <https://doi.org/10.1016/j.tics.2014.02.010>





Publication ethics: Plagiarism

an example of plagiarism:

Hickman, S. J., Dalton, C. M., Miller, D. H., & Plant, G. T. (2002). Management of acute optic neuritis. *The Lancet*, 360, 1953-1962.

Midgard, R. et al. (2005). Optikusnevritt – diagnose, behandling og oppfølging. *Tidsskrift for den Norske Laegeforening*, 125, 425-428.

- Ms submitted (2004), 11 authors – Norwegian experts in that field
- Ms sent out for peer review and review(s) very favorable
- Ms published (2005)
e-mail from a Danish editor, hints at similarity with article in Lancet (2002) → Plagiarism?





Publication ethics: Plagiarism

REVIEW

Review

Management of acute optic neuritis

S J Hickman, C M Dalton, D H Miller, G T Plant

Optic neuritis is a common condition that causes reversible loss of vision. It can be clinically isolated or can arise as one of the manifestations of multiple sclerosis. Occasional cases are due to other causes, and in these instances management can differ radically. The treatment of optic neuritis has been investigated in several trials, the results of which have shown that corticosteroids speed up the recovery of vision without affecting the final visual outcome. Other aspects of management, however, are controversial, and there is uncertainty about when to investigate and when to treat the condition. Here we review the diagnostic features of optic neuritis, its differential diagnosis, and give practical guidance about management of patients. The condition's association with multiple sclerosis will be considered in the light of studies that define the risk for development of multiple sclerosis and with respect to results of trials of disease-modifying drugs in these individuals.

Optic neuritis is common, having an incidence of 1–5 per 100 000 per year.^{1,2} The incidence is highest in caucasians,¹ in countries at high latitudes,² and in spring.³ Individuals aged 20–49 years are most at risk, with women more often affected than men.² The condition usually presents as subacute unilateral loss of vision, although loss of vision in both eyes can arise, either simultaneously or sequentially. Most instances of optic neuritis are due to idiopathic inflammatory demyelination, which can arise in isolation, or as a manifestation of multiple sclerosis.³

Despite some major studies there are still many controversial areas in the management of optic neuritis, with differences of opinion expressed in surveys done to

might be seen by the patient on eye movement.¹¹ Clearly, subclinical cases are frequent, since some patients present with Uhthoff's phenomenon (visual deterioration on getting warm, or during exercise),¹² and delayed visual evoked potentials are not uncommon in early multiple sclerosis, even without a previous history of optic neuritis.¹⁷

The maximum visual loss varies from minor blurring to no perception of light in the affected eye. Abnormal colour vision, reduced contrast sensitivity, visual field loss, and a relative afferent pupillary defect (RAPD) are usually present in the affected eye.^{10,11} The presence of an RAPD is a useful objective sign of a unilateral optic neuropathy, although it is not specific for optic neuritis. The absence of

Optikusnevritt – diagnose, behandling og oppfølging

Sammendrag

Bakgrunn. Optikusnevritt er en vanlig tilstand som kan opptre isolert eller som en manifestasjon av multipel sklerose. Tilstanden er godt klinisk karakterisert, men differensialdiagnostisk vil mange tilstander måtte overveies. Behandling av optikusnevritt har vært undersøkt i flere studier. Disse viser at kortikosteroider bidrar til raskere restitusjon av synsstyrken uten at den endelige synsstyrken påvirkes vesentlig. Både diagnose og behandlingsmuligheter har endret seg i de senere år. Aspekter ved utredning, behandling og oppfølging er kontroversielle.

Materiale og metode. En nasjonal gruppe av nevrologer og øyeleger har vurdert retningslinjer for diagnose, behandling og oppfølging av optikusnev-

Rune Midgard

rune.midgard@helsenr.no
Nevrologisk avdeling
Molde sjukehus
6407 Molde
og
Haukeland Universitetssykehus

Johan H. Seland

Haukeland Universitetssykehus

Harald Hovdal

St. Olavs Hospital

Elisabeth Gulowsen Celius

Ketil Eriksen
Ulleval universitetssykehus

Ditlev Jensen

Rikshospitalet

Hilde Heger

Ulleval universitetssykehus

Svein Ivar Mellgren

Universitetssykehuset Nord-Norge

Alexandra Wexler

Øyeavdelingen

St. Olavs Hospital

Antonie Giæver Beiske

Klinikk og sykdomsforløp

I ramme 1 skisseres de typiske symptomer og tegn ved optikusnevritt (11). Tilstanden viser seg som regel som en subakutt ensidig synsreduksjon med moderate smerter som aksentueres ved øyebevegelser og progredier i løpet av få dager til to uker (12). Smertintensiteten er varierende, nattesøvn forstyrres vanligvis ikke, og en tidel rapporterer ingen smerte. Enkelte pasienter observerer lysplim (fotopsier) ved øyebevegelser. Noen pasienter fremviser Uhthoffs fenomen (synsreduksjon ved økt kroppstemperatur eller i tilknytning til fysisk anstrengelse). Forsinket visuelt fremkalt respons er heller ikke uvanlig å finne ved debut av multipel sklerose, noe som kan tyde på en tilsynelatende asymptomatisk optikusnevritt (13).

Den maksimale synsreduksjon varierer fra lett tåkesyn til manglende lyssans på affisert øye. Redusert fargesyn, redusert kontrastsensitivitet, synsfeltfall og relativ af-



Publication ethics: Plagiarism

authors' responses to the accusation of plagiarism:

- *first author:* “I haven’t read the Lancet article since 2003, but I see now when I read them side by side that our article unfortunately is very similar. I am very sorry about this, but I did not intentionally try to translate or copy the article by Hickman and colleagues.”
- *co-author:* “Review articles covering the same subject matter will always be very similar and in this case not controversial at all.”
- *co-author:* “The article was written by one of us, the others have read and commented on the text.”
- *co-author:* “All I can do is to offer my strongest apologies. I realize now that my contribution and work on this article was not enough for me to be a co-author, and I should immediately have said that I didn’t want to be listed as a co-author.”





Publication ethics: Plagiarism

- **science is cumulative:** If I have seen a little further (than others), it is by standing on the shoulders of giants. (Newton, 1676)
- **plagiarism:** submitting someone else's work as your own
- **UiB policy:** plagiarism check with Urkund (text recognition software) → consequences!
- **how to avoid? avoid copy + paste**
use your own words (paraphrasing) or direct quotes ("...") + pp.
always provide correct source (in text & reference list)





Publication ethics: Plagiarism

Paraphrasing: describe with own words what you have read

legitimate to borrow, but it requires understanding the ideas expressed in the source

→ extract / keep the content

→ change the language, the wording and the structure

Common mistakes

- use of more than three successive words from the source
- lack of significant rewording or change in structure
- forgetting to name the reference





Publication ethics: Plagiarism

Exercise 1

Original source: Resilience refers to a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development. Research on resilience aims to understand the processes that account for these good outcomes. Resilience is an inferential and contextual construct that requires two major kinds of judgments (Masten, 1999b; Masten & Coatsworth, 1998).

Masten, A. S. (2001). Ordinary magic. Resilience processes in development. *American Psychologist*, 56(3), 227-238.
<http://dx.doi.org/10.1037/0003-066X.56.3.227>

Excerpt from student A's term paper: Masten (2001) believes that resilience is characterized by good outcomes in spite of serious threats to adaptation or development.





Publication ethics: Plagiarism

Exercise 1

Original source: Resilience refers to a class of phenomena **characterized by good outcomes in spite of serious threats to adaptation or development.**

Research on resilience aims to understand the processes that account for these good outcomes. Resilience is an inferential and contextual construct that requires two major kinds of judgments (Masten, 1999b; Masten & Coatsworth, 1998).

Masten, A. S. (2001). Ordinary magic. Resilience processes in development. *American Psychologist*, 56(3), 227-238.
<http://dx.doi.org/10.1037/0003-066X.56.3.227>

Excerpt from student A's term paper: Masten (2001) believes that resilience is **characterized by good outcomes in spite of serious threats to adaptation or development.** → **source cited, but verbatim copy**





Publication ethics: Plagiarism

Exercise 2

Original source: Resilience refers to a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development. Research on resilience aims to understand the processes that account for these good outcomes. Resilience is an inferential and contextual construct that requires two major kinds of judgments (Masten, 1999b; Masten & Coatsworth, 1998).

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<http://dx.doi.org/10.1037/0003-066X.56.3.227>

Excerpt from student B's term paper: Resilience is sometimes defined as favourable outcomes in the face of significant threats to an individual's normal development.





Publication ethics: Plagiarism

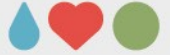
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Masten, A. S. (2001). Ordinary magic. Resilience processes in development. *American Psychologist*, 56(3), 227-238.
<http://dx.doi.org/10.1037/0003-066X.56.3.227>

Excerpt from student B's term paper: Resilience is sometimes defined as favourable outcomes in the face of significant threats to an individual's normal development (Masten, 2001) → **but wording OK, no source cited**





Publication ethics: Plagiarism

Exercise 3

Original source: Resilience refers to a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development. Research on resilience aims to understand the processes that account for these good outcomes. Resilience is an inferential and contextual construct that requires two major kinds of judgments (Masten, 1999b; Masten & Coatsworth, 1998).

Masten, A. S. (2001). Ordinary magic. Resilience processes in development. *American Psychologist*, 56(3), 227-238.
<http://dx.doi.org/10.1037/0003-066X.56.3.227>

Excerpt from student C's term paper: According to Masten (2001), two judgments have to be made in order for resilience to occur. First of all, there must be evidence of a significant risk to the individual that threatens normal development.





Publication ethics: Plagiarism

Exercise 3

Original source: Resilience refers to a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development. Research on resilience aims to understand the processes that account for these good outcomes. Resilience is an inferential and contextual construct that requires two major kinds of judgments (Masten, 1999b; Masten & Coatsworth, 1998).

Masten, A. S. (2001). Ordinary magic. Resilience processes in development. *American Psychologist*, 56(3), 227-238.
<http://dx.doi.org/10.1037/0003-066X.56.3.227>

Excerpt from student C's term paper: According to Masten (2001), two judgments have to be made in order for resilience to occur. First of all, there must be evidence of a significant risk to the individual that threatens normal development. → **Fine! Phrasing okay and source given**





Publication ethics: Plagiarism

Exercise 4

Original source: A molecule of water (chemical formula, H₂O) contains two atoms of hydrogen and one atom of oxygen. Although its formula (H₂O) seems simple, water exhibits very complex chemical and physical properties that are incompletely understood. For example, its melting point, 0 °C, and boiling point, 100 °C , are much higher than would be expected by comparison with analogous compounds, ...

The Encyclopedia Britannica

Excerpt from student D's term paper: A water molecule consists of one atom of oxygen and two atoms of hydrogen. Fresh water freezes at 0 degrees Celsius, and boils at 100 degrees Celsius.





Publication ethics: Plagiarism

Exercise 4

Original source: A molecule of water (chemical formula, H₂O) contains two atoms of hydrogen and one atom of oxygen. Although its formula (H₂O) seems simple, water exhibits very complex chemical and physical properties that are incompletely understood. For example, its melting point, 0 °C, and boiling point, 100 °C, are much higher than would be expected by comparison with analogous compounds, ...

The Encyclopedia Britannica

Excerpt from student D's term paper: A water molecule consists of one atom of oxygen and two atoms of hydrogen. Fresh water freezes at 0 degrees Celsius, and boils at 100 degrees Celsius. → **fine! everyone knows this**





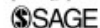
Publication ethics: Falsification

Retraction



Retraction of “A Common Discrete Resource for Visual Working Memory and Visual Search”

Psychological Science
2015, Vol. 26(9) 1527
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Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0956797615602706
pss.sagepub.com



The following article has been retracted by the Editor and publishers of *Psychological Science*:

Anderson, D. E., Vogel, E. K., & Awh, E. (2013). A common discrete resource for visual working memory and visual search. *Psychological Science*, 24, 929–938. doi:10.1177/0956797612464380

The retraction follows the results of an investigation into the work of author David E. Anderson. The Office

of Research Integrity (U.S. Department of Health and Human Services), together with the University of Oregon, has determined that Anderson falsified data affecting Figures 3e and 3f, removing outlier values and replacing outliers with mean values, to produce results that conformed to predictions. Anderson's coauthors were in no way implicated in the research misconduct, and all authors have seen and agreed to this retraction.





Publication ethics: Falsification

Jon Sudbø: the cancer researcher is in January 2006 uncovered to have systematically fabricated data

- Sudbø loses his job, academic credentials, and professional authorization
- articles are retracted (overview at next slide)

BBC NEWS

[Watch](#) **One-Minute World News**

Last Updated: Monday, 16 January 2006, 14:22 GMT

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Cancer study patients 'made up'

A cancer expert invented patients for a study which concluded taking common painkillers could protect against oral cancer, it is alleged.

Dr Jon Sudbo reportedly made up patients and case histories for the study published in highly-respected Lancet medical journal last October.

Dr Sudbo has not commented publicly on the claims.

But a spokeswoman for Oslo's Norwegian Radium Hospital, where he works, said he had admitted falsifying data.

The revelation comes just days after work published in the journal Science by South Korean cloning expert Hwang Woo-suk was revealed as fabricated.

Hospital spokeswoman, Trine Lind said: "We are shocked. This is the worst thing that could happen in a research institution like ours."

Stein Vaaler, director of external relations at the hospital, added: "He published an article in The Lancet in October last year whose data is totally false, actually totally fabricated.



Aspirin was among the drugs studied

" This is the worst thing that could happen in a research institution like ours "

Trine Lind

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Publication ethics: Falsification

- Sudbø J, Lee JJ, Lippman SM, Mork J, Sagen S, Flatner N, Ristimäki A, Sudbø A, Mao L, Zhou X, Kildal W, Evensen JF, Reith A, Dannenberg AJ. (2005). Non-steroidal anti-inflammatory drugs and the risk of oral cancer: a nested case-control study. *Lancet*, 366(9494), 1359-66.
- Sudbø J. (2004). Novel management of oral cancer: a paradigm of predictive oncology. *Clin Med Res.*, 2(4):233-42.
- Sudbø J, Samuelsson R, Risberg B, Heistein S, Nyhus C, Samuelsson M, Puntervold R, Sigstad E, Davidson B, Reith A, Berner A. (2005). Risk markers of oral cancer in clinically normal mucosa as an aid in smoking cessation counseling. *J Clin Oncol*, 23(9), 1927-33.
- Sudbø J, Lippman SM, Lee JJ, Mao L, Kildal W, Sudbø A, Sagen S, Bryne M, El-Naggar A, Risberg B, Evensen JF, Reith A. (2004). The influence of resection and aneuploidy on mortality in oral leukoplakia. *N Engl J Med*, 350(14), 1405-13.
- Sudbø J, Bryne M, Mao L, Lotan R, Reith A, Kildal W, Davidson B, Søland TM, Lippman SM. (2003). Molecular based treatment of oral cancer. *Oral Oncol.*, 39(8):749-58.
- Sudbø J. (2003). [Chemoprevention of oral cancer]. *Tidsskr Nor Laegeforen.*, 123(11), 1518-21.
- Sudbø J, Ristimäki A, Sondresen JE, Kildal W, Boysen M, Koppang HS, Reith A, Risberg B, Nesland JM, Bryne M. (2003) Cyclooxygenase-2 (COX-2) expression in high-risk premalignant oral lesions. *Oral Oncol*, 39(5), 497-505.
- Sudbø J, Reith A. (2002). When is an oral leukoplakia premalignant? *Oral Oncol.*, 38(8), 813-4.
- Sudbø J, Warloe T, Aamdal S, Reith A, Bryne M. (2001). [Diagnosis and treatment of oral precancerous of oral precancerous precancerous lesions]. *Tidsskr Nor Laegeforen.*, 121(26), 3066-71.
- Sudbø J, Ried T, Bryne M, Kildal W, Danielsen H, Reith A. (2001). Abnormal DNA content predicts the occurrence of carcinomas in non-dysplastic oral white patches. *Oral Oncol.*, 37(7), 558-65.
- Sudbø J, Bryne M, Johannessen AC, Kildal W, Danielsen HE, Reith A. (2001). Comparison of histological grading and large-scale genomic status (DNA ploidy) as prognostic tools in oral dysplasia. *J Pathol.*, 194(3), 303-10.
- Sudbø J, Kildal W, Risberg B, Koppang HS, Danielsen HE, Reith A. (2001). DNA content as a prognostic marker in patients with oral leukoplakia. *N Engl J Med.*, 344(17), 1270-8.





Publication ethics: Falsification

Diederik Stapel: Professor for Social Psychology at Tilburg University, founder of TiBer, the Tilburg Institute for Behavioral Economics Research

- inquiry: fictitious data in several dozen publications
- suspension from his duties (September 2011)
- returned his Ph.D. certificate to the University of Amsterdam (November 2011) noting that his “behavior of the past years are inconsistent with the duties associated with the doctorate”
- victims: his 20 PhD students (12 theses relied entirely or partly on fictitious data, 1 defense postponed because of suspicions, 7 theses cleared)





Publication ethics: Correction

- if significant errors in published data are discovered, take reasonable steps to correct these → correction note, retraction

Full reference to the article being corrected; ideally incl. precise location of the error

Correction to Klauer et al. (2010)

In the article “Conditional Reasoning in Context: A Dual-Source Model of Probabilistic Inference,” by Karl Christoph Klauer, Sieghard Beller, and Mandy Hütter (*Journal of Experimental Psychology: Learning Memory, and Cognition*, 2010, Vol. 36, No. 2, pp. 298–323), the dual-source model is overparameterized. Only the products $\lambda\tau$ of the λ and τ parameters are uniquely identified by the data. This has no consequences for the ξ parameters, for ratios of τ parameters estimated with the same λ , for ratios of λ parameters associated with the same τ parameters, nor for the fit values. The model fit is, however, achieved more parsimoniously than stated in Klauer et al. because one parameter (Experiments 1, 2, and 4) or two parameters (Experiment 3) are redundant.

To fix the scale for τ and λ parameters, one of them has to be set to one. We recommend to set the largest of $\tau(\text{MP})$, $\tau(\text{MT})$, $\tau(\text{AC})$, and $\tau(\text{DA})$ equal to one. This yields unique parameter estimates for τ and λ but has consequences for their interpretation: Differences in overall level of the profile of τ parameters over the four inferences (due to, e.g., differences in cognitive load), if any, would be removed from the τ estimates and would show up in the λ parameters. The above constraint is the one implicitly imposed almost perfectly by the estimation method used in Klauer et al. (2010). In consequence, when the constraint is explicitly enforced, the numerical values of the parameter estimates reported in Klauer et al. change only minimally, and the outcome of all of the significance tests reported remains the same.

DOI: 10.1037/a0019445

quotation of the error (or accurate paraphrase)

correction in concise, unambiguous wording





Publication ethics: Retraction



Retraction notice

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2018, Vol 12(2) 1
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DOI: 10.1177/2049463717728039
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At the request of the authors, the following article has been retracted.

The moderating factors of neuroticism and extraversion in pain anticipation, Jenna L Gillett, Emily Mattacola, British Journal of Pain, first published online August 23rd 2017 DOI: 10.1177/2049463717728039

It has come to the attention of the authors that the statistical tests detailed in this paper were performed incorrectly and therefore the results collected are unreliable. The authors apologise for this error.

Original Article



RETRACTION: The moderating factors of neuroticism and extraversion in pain anticipation

Jenna L Gillett and Emily Mattacola

British Journal of Pain
1-8
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Abstract

This study investigates the moderator relationship between three psychological variables on pain threshold and tolerance: pain anticipation, neuroticism and extraversion. It hypothesised that (a) a significant effect of anticipation on both pain threshold and tolerance will exist wherein high-intensity pain anticipation will predispose lower pain threshold and tolerance, and (b) high neuroticism and low extraversion will moderate this relationship. The study was conducted using 76 participants who completed the cold pressor test under one of three conditions: control condition, intense-pain expectant condition or low-pain expectant. The results of the study showed no significant effect of anticipation and no significant moderator relationship for neuroticism or extraversion on pain threshold and tolerance, thus both hypotheses are not supported. Implications for future research are discussed regarding new and unique findings, as no prior research into the moderator relationship between anticipation, personality traits and pain currently exists.

Keywords

Pain, nociceptive pain, pain threshold, pain tolerance, cold pressor test, pain anticipation, personality

Introduction

Nociception can be defined as the sensory nervous systems' response to internal or external physiological damage.^{1,2} Moreover, pain sensation is impacted upon by both physiological and psychological states.³ Physiological factors that have been evidenced as significant influences on nociceptive experiences include gender,⁴⁻⁸ ethnicity,^{9,10} age¹¹⁻¹⁴ and genetic predisposition such as effects related to the *MOR* gene mutation (alterations in

impacting pain experiences.²³ High neuroticism correlates with high pain thresholds²⁴ and tolerance levels.^{25,26} Additionally, those high in introversion have also been associated with higher pain thresholds/tolerances.^{25,26} Thus, high neuroticism and low extraversion independently predict higher pain thresholds/tolerances. Individuals who possess both these traits termed 'sensitive introverts' are therefore considered to have

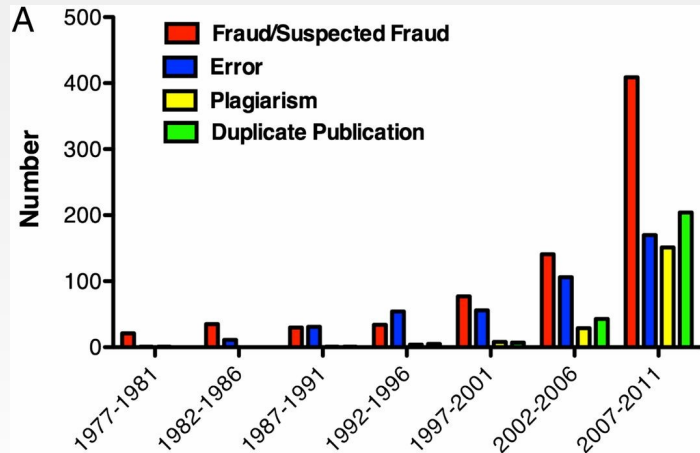




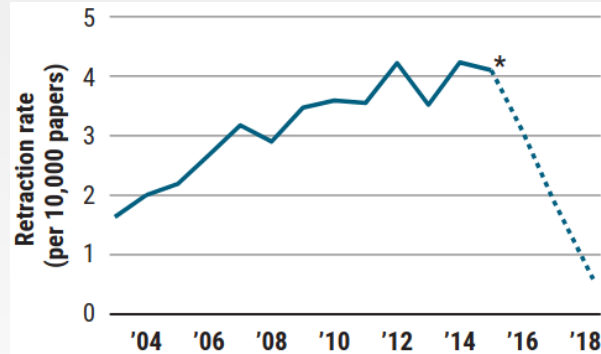
Publication ethics: Retraction

most common reasons:

(real + suspected) fraud, duplicate publication, error, plagiarism



Fang, F. C., Steen, R. G., & Casadevall, A. (2012). Misconduct accounts for the majority of retracted scientific publications. *PNAS*, *110*(3), 17028-17033. <https://doi.org/10.1073/pnas.1212247109>



*The rate appears to decline after 2015, but numbers are almost certainly incomplete because of delays in publishing retractions.

Brainard, J., & You, J. (2018, October 25). *What a massive database of retracted papers reveals about science publishing's 'death penalty'*. *Science*. <https://www.sciencemag.org/news/2018/10/what-massive-database-retracted-papers-reveals-about-science-publishing-s-death-penalty>





Publication ethics: Guidelines

- American Psychological Association (2017). *Ethical principles of psychologists and code of conduct*.
<https://www.apa.org/ethics/code/index>
- International Committee of Medical Journal Editors (2019). *Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals*.
<http://www.icmje.org/recommendations>
- Committee on Publication Ethics (n.d.). *Promoting integrity in scholarly research and its publication*. <https://publicationethics.org/>





Summary

- why scientific findings should be published and why there are standards for scientific presentation
- how a scientific report in psychology should look like
- how to write in a scientific style
- how to present your results
- how to refer appropriately to the work of others
- how the publication process works and how to deal with ethical issues (authorship, plagiarism, etc.)





How / where can you get help?

- <https://apastyle.apa.org/>; <https://apastyle.apa.org/jars>
- <https://www.unit.no/tjenester/norsk-apa-referansestil>
- examples in the APA manual
 - sample papers (pp. 50 – 67)
<https://apastyle.apa.org/style-grammar-guidelines/paper-format/sample-papers>
 - table checklist and examples (pp. 207; 210 – 223)
<https://apastyle.apa.org/style-grammar-guidelines/tables-figures/sample-tables>
 - figure checklist and examples (pp. 232; 234 – 250)
<https://apastyle.apa.org/style-grammar-guidelines/tables-figures/sample-figures>
 - reference overview and examples (pp. 313 – 352)
<https://apastyle.apa.org/style-grammar-guidelines/references/examples>





Literature

American Psychological Association (Ed.). (2020). *Publication manual of the American Psychological Association* (7th ed.). American Psychological Association. <https://doi.org/10.1037/0000165-000>

Chapters 1 (pp. 3-26), 2 (pp. 29-67), 3 (pp. 71-108), 4 (pp. 111-127), 8 (pp. 253-278), and 9 (pp. 281-309) are mandatory. This book is a reference work and is relevant for term papers, theses, research, etc.

Sternberg, R. J. (Ed., 2019). *Guide to publishing in psychology journals* (2nd ed.). Cambridge University Press. <https://doi.org/10.1017/9781108304443>
Many practical tips on how to write empirical papers and literature reviews.

Rosnow, R. L., & Rosnow, M. (2011). *Writing papers in psychology* (9th ed.). Cengage Learning.

A good book for students writing term papers in APA-style.

Bem, D. J. (1995). Writing a review article for *Psychological Bulletin*. *Psychological Bulletin*, 118, 172-177. <https://doi.org/10.1037/0033-2909.118.2.172>
Excellent and entertaining introduction to the art of article writing





**Thank you very much
for your attention!**