



Systematic misuse of quality indicators & labelling of negative characteristics in information infrastructures

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1

Quality indicators in scholarly communication

Quality indicators in scholarly communication



Formal quality indicators for journals

Examples:

- metrics (h-index, Impact Factor, Altmetrics ...)
- indexed in academic databases (Scopus, WoS ...)
- not blacklisted (e.g. in Cabells)
- memberships (COPE, OASPA)

Formal quality indicators for papers

Examples:

- published in recognised journal
- disclosure of authorship, affiliations, financial support, conflicts of interest
- compliance with ethical guidelines and good scientific practice

Content-related quality indicators

Examples:

- originality
- scientific quality
- relevance
- reproducibility
- answering the research question
- peer review

How are quality indicators misused?



Examples at journal level
(predatory journals):

- false or misleading information (e.g. fake impact factors, fictitious editorial boards, false claims of being indexed in academic databases)
- manipulation of metrics (e.g. citation circles, coercive citation)



Examples at article level:

- choosing a predatory journal
- false or misleading information (e.g. honorary authorship, fake co-authors)
- false information on conflicts of interest
- manipulation of citations (e.g. purchased citations, citation circles)

2

Identifying & labelling quality indicators of journals

Identifying positive and negative characteristics of journals in information infrastructures



Using assessments from other sources

In-house assessment



Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

- whitelists (e.g. DOAJ, WoS, Scopus)
- blacklists (e.g. Cabells Predatory Reports)

In-house assessment

Advantages:

- less time-consuming than making your own assessment
- regularly updated

Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

- **whitelists** (e.g. DOAJ, WoS, Scopus)
- blacklists (e.g. Cabells Predatory Reports)

In-house assessment

Advantages:

- focus on positive indicators
- less problematic from a legal perspective than blacklists

Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

- **whitelists** (e.g. DOAJ, WoS, Scopus)
- blacklists (e.g. Cabells Predatory Reports)

In-house assessment

Disadvantages:

- 'grey area' journals are sometimes included
- small but reputable journals may not be included
- journals are frequently removed from DOAJ or WoS → make sure to keep labels accurate
- licence costs (WoS, Scopus)

Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

- whitelists (e.g. DOAJ, WoS, Scopus)
- **blacklists** (e.g. Cabells Predatory Reports)

In-house assessment

Disadvantages:

- always 'behind' the questionable journals – there are far more predatory journals than are listed in these sources
- people may begin to assume that unlabelled journals must be reputable
- license costs
- what if a journal is both whitelisted and blacklisted?

Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

- whitelists (e.g. DOAJ, WoS, Scopus)
- **blacklists** (e.g. Cabells Predatory Reports)

In-house assessment

Advantage:

- labelling based on a recognised and transparent source such as Cabells may be less legally vulnerable than in-house assessment.

Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

In-house assessment

- list of individual criteria
- badge or certificate
- rating system (e.g. traffic light system, star rating)



Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

In-house assessment

- **list of individual criteria**
 - badge or certificate
 - rating system (e.g. traffic light system, star rating)
- existing checklist (e.g. Think.Check.Submit, Cabells) or creation of in-house checklist?
 - only positive or negative characteristics, or both?
 - listing negative characteristics can be legally problematic

Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

In-house assessment

- list of individual criteria
- **badge or certificate**
- rating system (e.g. traffic light system, star rating)

- no listing of individual criteria
- journals that do not meet these criteria are not labelled
- no differentiation in labelling is possible
- what if there are both positive and negative quality indicators?

Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

In-house assessment

- list of individual criteria
- badge or certificate
- **rating system** (e.g. traffic light system, star rating)
 - no listing of individual criteria
 - more precise differentiation than with a badge/certificate
 - the EZB already uses a traffic light system → risk of confusion

Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

In-house assessment

- list of individual criteria
- badge or certificate
- rating system (e.g. traffic light system, star rating)

Advantages of all options:

- no dependency on other providers (i.e. one can also label journals that are on neither whitelisted nor blacklisted)
- define or weight the assessment criteria and adjust or update them as necessary

Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

In-house assessment

- list of individual criteria
- badge or certificate
- rating system (e.g. traffic light system, star rating)

Disadvantages of all options:

- individual checks are time-consuming
- journals need to be regularly reviewed to keep classification accurate and up-to-date

Identifying positive and negative characteristics of journals in information infrastructures

Using assessments from other sources

In-house assessment

- list of individual criteria
- badge or certificate
- rating system (e.g. traffic light system, star rating)
- (in future possibly AI-based evaluation tools)



3

Issues & challenges of labelling journals

Challenges in labelling journals 1: legal aspects



Legal aspects should be discussed with a lawyer



Personal rights & competition law

- damage to reputation, defamation
 - competition law
- criteria & rating must be objective, transparent and verifiable



International legal framework

- academic platforms often operate internationally
- different national legal systems may apply
- what is permissible in one country may be unlawful in another



Right to correct (right to rectification)

- affected journals or publishers have the right to request correction
- provide procedures for complaints and corrections



Challenges in labelling journals 2: transparency & verifiability



Assessments that lack transparency or are not traceable may be **legally contestable**.



The platform must **disclose its evaluation criteria** and, upon request, be able to **explain** how a rating was arrived at. **Documentation** is important in the event of disputes.



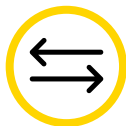
Other platforms or users must be able to **understand** the assessment and, where necessary, **reproduce** it.



Challenges in labelling journals 3: keeping data current



Regular updates ensure that ratings remain **relevant**, **accurate** and **trustworthy**.



Scholarly journals change frequently

- changes in editorial guidelines, peer-review processes, open-access policies, fee structures, etc.
- new positive or negative characteristics may emerge
- a 'poor-quality journal' or even a 'predatory journal' may have improved – or vice versa



Outdated information can lead to journals being misjudged

- out-of-date negative characteristics can unjustly stigmatise journals.
- out-of-date positive characteristics can encourage researchers to publish in questionable journals
- platforms that are not updated regularly (→ timestamps, version history) run the risk of becoming legally vulnerable (defamation, unfair competition).



Further issues



A labelling system encourages blind reliance from institutions and researchers.

If **questionable** journals are labelled using

- a blacklist (e.g. Cabells), users may perceive journals that do not carry this label as reputable, even though they may not be (not all predatory journals are listed on Cabells)
- a list of criteria, users may perceive journals for which no negative characteristics are noted as reputable, even though they may not be (perhaps the journal simply hasn't been reviewed yet)

Further issues



A labelling system encourages blind reliance from institutions and researchers.

If reputable journals are labelled using

- a whitelist (e.g. WoS, Scopus, DOAJ), users may perceive journals that do not carry this label as less reputable, even though they may not be (not all reputable journals are listed in WoS, Scopus or DOAJ; non-English-language journals in particular tend to be at a disadvantage in such listings)
- a list of criteria, users may perceive journals for which no positive characteristics are noted as less reputable, even though they may not be (perhaps the journal simply hasn't been reviewed yet)

Further issues



How to deal with conflicting quality indicators?

Examples:

- a journal is indexed on both a whitelist and a blacklist
- a journal exhibits both positive and negative quality indicators

Possible solutions:

- the whitelist 'takes precedence' over the blacklist, or vice versa
- individual quality indicators are weighted, i.e. some are more important than others when assessing a journal
- all quality indicators – including contradictory ones – are listed

Further issues

Discipline-specific differences

Quality indicators are sometimes weighted differently across various disciplines (e.g. peer review, impact factor).



Key points

Identifying quality indicators & labelling journals

- formal vs. content-related quality indicators
- labelling based on
 - assessments from external sources (whitelists, blacklists)
 - in-house list of criteria / badge or certificate / rating system



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Points to consider

- legal aspects
- transparency & verifiability
- keeping data current
- how to deal with
 - conflicting quality indicators
 - users' perceptions of unlabelled journals

Thank you!



Questions?



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