# The Role of the Reviewer in Shaping a Manuscript's Fate: How to Review Effectively and Avoid Rejection



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Section 1

# The Philosophy and Responsibility of Peer Review

# What is Peer Review?

- Peer review is the process where experts from a specific field or discipline evaluate the quality of a peer's research to assess the validity, quality and often the originality of articles for publication.

1. Enhances quality: It improves the overall quality of research by providing authors with constructive feedback and suggestions for revision.
2. Identifies errors: Peer reviewers may identify inaccuracies, methodological issues and gaps in reasoning.
3. Facilitates collaboration: Peer review fosters connections between authors and reviewers, potentially leading to collaborations and further research opportunities.

# A Brief History of Peer Review in Scientific Journals

- Peer review, as a formal process, emerged in the 17th century with the establishment of early scientific journals such as the **Philosophical Transactions of the Royal Society** (world's first and longest-running scientific journal, launched in March **1665**).
- Initially, editorial decisions were largely made by a small group of society members rather than external experts.
- Systematic external peer review became more common in the 19th and early 20th centuries as scientific disciplines expanded and specialization increased.
- Today, it remains the cornerstone of scholarly publishing, adapting to innovations such as double-blind, open, and post-publication review models.

# Why Peer Review Still Matters?

- Peer review is not a formality; it is a scientific quality-control system.
- Safeguards scientific integrity
- Filters methodological flaws
- Improves clarity and reproducibility
- Protects the credibility of journals and institutions
- Shapes the scientific record

# The Reviewer's Dual Role: Gatekeeper vs. Mentor

- Gatekeeper: protects literature from flawed science.
- Mentor: helps authors improve their work.
- Balance between rigor and fairness.
- Avoiding reviewer arrogance.

# Models of Peer Review

- **Single-blind review:**
  - ***The authors do not know who the reviewers are*.**
- **Double-blind review:**
  - *Both the authors and reviewers keep their anonymity*.
- **Open peer review:**
  - ***Allowing self-selected reviewers to comment on an article, rather than (or in addition to) having reviewers who are selected by the editors*.**
- **Post-publication review:**
  - ***The review is done after the manuscript has been published. anyone can participate in the assessment of an article and suggest changes for improvement*.**

# The Invisible Impacts of Good Reviewing for Reviewer

- Builds academic reputation
- Enhances critical thinking
- Improves your own writing skills
- Opens editorial board opportunities

➨ Many editorial board invitations originate from consistently high-quality reviews.

# How Reviewers Shape a Manuscript's Fate

- Language of the review matters
- Tone influences editorial interpretation
- Strong methodological criticism → likely rejection
- Conditional endorsement → major revision
- Structured feedback increases acceptance probability

➨ **Well-structured reviews increase your credibility with editors and may lead to future editorial invitations.**

# Reviewer vs. Editor: Who Makes the Final Decision?

- Editorial triage before peer review.
- Reviewer = advisor.
- Editor = decision-maker.
- Weight of reviewer recommendations.

➨ "Editors look for consensus, but not necessarily unanimity".

# Ethical Responsibilities of a Reviewer

- Confidentiality.
- Conflict of interest disclosure.
- No idea appropriation.
- Objective evaluation independent of personal bias.
- Timely response.

➨ What would you do if the manuscript competes directly with your own unpublished work?

# Section 2

# What Do Reviewers Actually Look For?

# The First Question a Reviewer Asks

- "Is this manuscript worth publishing?"
- Before details, reviewers subconsciously evaluate:
  - Does this add something new?
  - Is it scientifically sound?
  - Does it belong in this journal?

- Most decisions are directionally formed within the first 5–10 minutes of reading.

# Journal Fit and Strategic Alignment

- Even a strong paper can be rejected if:
  - Outside journal scope
  - Not impactful enough for the target tier
  - Audience mismatch

- Example contrast:
  - Broad-scope model like PLOS ONE
  - High-selectivity clinical focus like The Lancet
- Fit often outweighs technical quality.

# Novelty vs. Incremental Science

- Reviewers assess:
  - Conceptual novelty
  - Methodological novelty
  - Population novelty
  - Mechanistic insight
- Important distinction:

Replication ≠ lack of novelty — unless it adds no value.

- Red flag phrases reviewers notice: "First study ever…" (often incorrect).

# Methodological Rigor

- This is where many manuscripts fail.
- Reviewers evaluate:
  - Study design appropriateness
  - Inclusion/exclusion criteria clarity
  - Sample size justification (power analysis?)
  - Control groups validity
  - Bias minimization
- A statistically significant result does not compensate for flawed design.

# Statistical Robustness

- Correct statistical tests
- Adjustment for confounders
- Multiple comparisons correction
- Reporting effect size, not only p-value
- Transparency of missing data

➨ Common fatal error:

**Misinterpretation of non-significant results as equivalence.**

# Internal Consistency and Logical Flow

**Reviewers check:**

- **Do results answer the stated objective?**
- **Are conclusions proportional to findings?**
- **Any over-interpretation?**
- **Any contradictions between tables and text?**

# Ethical and Reporting Standards

**Reviewers verify:**

- **Ethics committee approval**
- **Trial registration (if applicable)**
- **ARRIVE / CONSORT / STROBE adherence**
- **Data transparency**

➨ **Example:**

**Clinical trials without registration raise immediate concern.**

# Minor vs. Major vs. Reject: How Reviewers Differentiate

➨ **Minor Revision**

- Language
- Clarifications
- Small additional analyses

➨ **Major Revision**

- Methodological clarification
- Additional experiments
- Substantial restructuring

**Reject**

- Fatal design flaw
- Lack of novelty
- Ethical concerns
- Deep statistical misinterpretation

❑ **Important: Reject ≠ bad science always, sometimes it means "wrong journal.**

# Key Takeaway for Faculty

- If you want to reduce rejection risk:

"Think like a reviewer before submission".

- Ask yourself:
  - What would I criticize?
  - What would make me uncomfortable as a reviewer?
  - Would I recommend this paper for publication?

## Section 3

# Why Do Manuscripts Get Rejected?

# Rejection Is the Norm, Not the Exception

- Average rejection rate in reputable journals: 50–80%
- In high-impact journals: >85%
- Desk rejection often exceeds peer-review rejection

➨ Rejection is a filtering mechanism, not a personal judgment.

# The Predictability Principle

- A manuscript is likely to be rejected when:
  - Novelty is weak
  - Methodology is fragile
  - Statistics are questionable
  - Journal fit is incorrect
  - Response to reviewers lacks depth
- Manuscript fate is rarely random.

# The Silent Editorial Filter (Triage)

- **Before peer review:**
  - **Scope mismatch**
  - **Weak abstract**
  - **Poor cover letter**
  - **Obvious methodological flaws**
- **Many faculty underestimate this stage. Editorial triage rejection rates in high-impact journals can exceed 60–80%.**

# Desk Rejection: The Silent Killer

- Common reasons:
  - Out of scope
  - Weak or unfocused abstract
  - Lack of novelty (obvious from introduction)
  - Poor methodological description
  - Low perceived impact
- Editors often decide within 5–7 minutes.
- Important insight:

If the abstract is weak, the manuscript rarely survives triage.

# Fatal Methodological Flaws

- These usually lead to rejection even after revision:
  - Inadequate sample size without justification
  - Improper control group
  - Selection bias
  - Confounding factors not addressed
  - Post-hoc hypothesis framing
- Editors rarely ignore strong methodological criticism.

# Statistical Errors That Trigger Rejection

- Inappropriate statistical tests
- No correction for multiple comparisons
- Overreliance on p-values
- Absence of effect sizes
- Misinterpretation of non-significant findings

➨ **Common problem:**

**Claiming equivalence based on non-significance.**

# Over-interpretation and Inflation of Findings

- **Red flags reviewers notice immediately:**
  - **Causal claims from observational data**
  - **Clinical recommendations from small pilot studies**
  - **Mechanistic speculation without evidence**
  - **“Groundbreaking” language without justification**
- **Editors are particularly sensitive to exaggerated conclusions.**

# Strategic Journal Selection Errors

- Many good papers are rejected because:
  - Impact mismatch
  - Audience mismatch
  - Tier miscalculation
  - Ignoring journal scope
- Strong science + wrong journal = rejection.

# Poor Response to Reviewers

- **Second-round rejection (after review) often occurs due to:**
  - **Defensive tone**
  - **Selective responses**
  - **Ignoring critical comments**
  - **Inadequate revision**
  - **Failure to provide rebuttal evidence**

- **Important principle:**

**Editors evaluate the quality of your response as much as the revision itself.**

# Ethical and Transparency Concerns

- **Immediate rejection triggers:**
  - **Missing ethics approval**
  - **Unregistered clinical trial**
  - **Suspicion of plagiarism**
  - **Data inconsistencies**
  - **Undisclosed conflicts of interest**
- **Ethical doubts rarely get a second chance.**

# Emotional vs. Strategic Reaction to Rejection

- **Unproductive responses:**
  - Immediate resubmission elsewhere without revision
  - Emotional appeal
  - Blaming reviewers
- **Productive response:**
  - Objective re-analysis
  - Structural revision
  - Strategic journal repositioning

# Key Takeaway for Faculty

- Most rejections are predictable before submission.
- Ask before submission:
  - Is there any fatal methodological flaw?
  - Is the statistical analysis defensible?
  - Is the journal tier realistic?
  - Is the abstract strong enough to survive triage?
- If the answer is uncertain → revise before submitting.

# Section 4

# How to Review Professionally and How to Reduce the Risk of Rejection

# Reviewing Is a Structured Analytical Process

- A high-quality review is not a list of random comments.
- Recommended structure:

1. Brief overall summary of the manuscript
2. General assessment (novelty, importance, methodology)
3. Major comments
4. Minor comments
5. Confidential comments to the editor (if needed)

- Structure, signals competence.

# Writing the Opening Paragraph of a Review

- **Strong opening example framework:**
  - One-sentence: summary of the study
  - One-sentence: evaluation of novelty
  - One-sentence: assessment of methodological soundness
  - Overall recommendation tone (without stating decision)
- **Why this matters:**

**Editors often rely heavily on the reviewer's first paragraph.**

# Major vs. Minor Comments: Be Precise

**Major comments should involve:**

- Study design flaws
- Statistical issues
- Missing critical analyses
- Over-interpretation
- Conceptual inconsistencies

**Minor comments should involve:**

- Clarity
- Grammar
- Formatting
- Small clarifications

**Common mistake:**

Labeling everything as “major”.

# Constructive vs. Destructive Reviewing

- **Constructive:**
  - Specific
  - Actionable
  - Evidence-based
  - Respectful
- **Destructive:**
  - Vague criticism
  - Dismissive language
  - Personal tone
  - Unsupported claims


- **Important principle: A rigorous review can still be respectful.**

# Maintaining Objectivity

- **Before submitting your review, ask:**
  - **Am I influenced by competition bias?**
  - **Would I say this comment face-to-face?**
  - **Is this critique about science or about preference?**
- **Ethical reviewing builds long-term credibility with editors.**

# From the Author's Perspective: Pre-Submission Self-Review

- **Before submission, perform an internal peer review:**
  - **Re-read the manuscript after 48 hours**
  - **Ask a colleague to critically review it**
  - **Check alignment between aim, methods, and conclusions**
  - **Verify statistical validity**
  - **Reassess journal fit**
- **Think:**

**"If I were reviewing this, where would I attack it?"**

# Strategic Journal Selection

- **Key criteria:**
  - **Scope alignment**
  - **Recent publications similarity**
  - **Acceptance rate (if known)**
  - **Review time expectations**
- **Match the manuscript to the journal's decision philosophy.**

# Writing an Effective Response to Reviewers

- Golden rules:
  - Thank the reviewers.
  - Address every comment explicitly.
  - Use a point-by-point structure.
  - Quote reviewer comments.
  - Indicate precisely where changes were made.
  - Provide justification when disagreeing.
- Editors evaluate professionalism in response tone.

# When to Appeal a Rejection from Reviewer

- **Appeal only if:**
  - There is a clear factual misunderstanding
  - A statistical misinterpretation occurred
  - The reviewer made a demonstrable error
- **Do NOT appeal because:**
  - You disagree emotionally
  - You feel the decision is unfair
- **Appeals should be evidence-based and concise.**

# Final Take-Home Framework

❑ As a reviewer:

- Be rigorous
- Be structured
- Be ethical
- Be constructive

❑ As an author:

- Think like a reviewer
- Eliminate fatal flaws before submission
- Respond strategically, not emotionally
- Choose journals realistically

# The Ultimate Message

- Think like a reviewer when writing.
- Think like an editor when selecting a journal.
- Think like a scientist when responding to a reviewer.

"High-quality science is written by authors — but it is refined and protected by responsible reviewers"

# Thanks for your attention