

Quality of editorial processes and peer review duration

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Introduction

- Peer review process is the weakest link in the process of scientific knowledge production.
- Valuable new knowledge lays untouched at reviewers' desks and editorial offices for extended periods of time.
- This is an unacceptable loss of time in the scientific process which in other respects has become much more efficient (literature review, analyses, communication, processing accepted papers).
- Clear to all of us here, but about how to change things opinions may differ, depending on our positions in the field: publisher, editor, librarian, supporting professional,....., or researcher
- Here Janine and I represent the perspective of the researcher
 - Own experience as researcher
 - Website SciRev: Researchers share experiences with review process

Researcher perspective

- Average university teacher/researcher does not publish lots of papers
- In my field something in the order of one per year.
- Other fields maybe more, but also generally more co-authors
- No two papers shortly after each other in same journal
- Hence little opportunity to learn to know the journals in your field well
- This means that submitting a paper to a journal is a kind of gamble; you send your work of a year or so into a black box and hope for the best

Researcher perspective

- This uncertainty is problematic, because publishing research is part of researchers core business, on which their future career perspectives heavily depend.
- Position vis-à-vis journals is very weak
- Editors are from the researcher perspective a kind of gods
- Even though they base their decisions on peer review reports, in the end it is their personal decision to reject or not.
- If their journal is running well, they can pick the best grapes from all submissions and reject the other ones.
- As researcher you have little options than wait and pray

Researcher perspective

- An often neglected aspect of the situation is that there is a fundamental power asymmetry in the relationship between researchers and journals
- Editors are allowed to evaluate many papers at the same time, but researchers are now allowed to submit their papers to more journals at the same time
- So the editor can compare a set of offers and select the best ones, while the researcher has to put her/his work of a year on one horse.
- This lack of free competition is motivated in all kinds of ways, but it is basically a form of protectionism, a reduction of competition dictated by a small set powerful market players.
- In line with anti trust regulations?

Lack of transparency

- Besides by a weaker market position, the situation of a researcher who submits a paper is further weakened by a lack of information on the way the editorial processes are organized.
- The handling of our manuscripts at editorial offices are less often mentioned in discussions about the duration of the peer review process
- But the time a manuscript spends at editorial offices takes a substantial part of the total time you have to wait for a decision
- Comparing journals with other journals in the same field makes clear that within fields there might be substantial variation in duration of the process
- Hence not only reviewers are important

Table 1 First response time

	Average (in weeks)	Within 1 month (in %)	Within 3 months (in %)	Within 6 months (in %)
All	13	19	68	90
Accepted	12			
Rejected	16			
General	11	11	77	96
Natural sciences	11	25	77	94
Engineering	13	21	71	89
Mathematics and Computer sciences	17	11	54	82
Medicine	8	28	84	98
Public health	9	27	81	97
Psychology	14	11	60	90
Economics and Business	18	10	55	82
Social sciences	17	8	50	86
Humanities	16	7	53	87

Huisman, J & J. Smits. (2017). Duration and quality of the peer review process: the author's perspective. *Scientometrics*, 113(1), 633–650

Quality of editorial processes

- How long does it take before an editor looks at our manuscript to evaluate whether it is potentially of interest or should be desk rejected?
- How long does it take and how much effort is spent on finding reviewers?
- What is done to stimulate reviewers to come up with their reports?
- After the review reports are received, how long does it take for the editor to evaluate the paper in light of the report and take a decision?
- After the decision is taken, how long does it takes before the authors are informed?

This paper

- Aim: gaining insight into the (variation in) efficiency of editorial processes and to what extent these editorial processes influence the duration of the review process.
- Important as for researchers what happens at the editorial offices remains to a large extent a black box
- If you have bad luck, you may get caught by a journal with an overworked editor and a badly organized office which after a year sends a few short reviews and informs you that your paper is rejected
- If the process takes long and you inquire about it, you very often hear that it has to do with reviewers (us) taking too much time
- We therefore need an indicator that provides information about the process without being influenced by reviewers
- Such an indicator might be the duration of immediate (desk) rejections

Immediate rejection time

- When a paper is received by a journal, a first evaluation takes place to determine whether the manuscript is fitted for the journal, interesting for the readers and potentially of sufficient quality to be – after one or more revision rounds – publishable in the journal.
- For journals this selection is important, because finding reviewers is increasingly difficult and the ones you have should not be bothered with papers that make a low chance of being published
- For authors it is important to hear it quickly when the manuscript is not considered fitted, so that it with little time loss can be send to another journal
- Given that a quick scan of abstract, introduction and conclusion often provides enough information for such a decision, a well organized journal normally should be able to inform the author(s) about such a rejection within – say -- a week time.

Table 3 Immediate rejection time

	Average (in days)	Within 1 week (in %)	Within 2 weeks (in %)	Within 4 weeks (in %)
All scientific fields	12	50	63	83
General	14	46	57	89
Natural sciences	11	54	72	90
Engineering	12	50	63	85
Mathematics and Computer sciences	17	46	54	68
Medicine	10	62	70	92
Public health	12	54	65	79
Psychology	15	32	45	77
Economics and Business	13	47	59	78
Social sciences	15	40	56	71
Humanities	14	50	63	81

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Data

- SciRev.org website
- Researchers share their experience with the peer review process
- 5222 reviews of the peer review process
- Immediately rejected: 991 (19.0%)
- Rejected after 1st rev round: 1119 (21.4%)
- Accepted after 1 or more rev rounds: 2950 (56.5%)
- Immediately accepted: 60 (1.1%)
- Withdrawn: 102 (2.0%)

Method

- Comparing immediate rejection time of journals with their duration of first review round → comparison within journals
- Taking the mean of both variables for each journal
- 347 journals left (journals with many observations count once)
- Bivariate and multivariate comparisons
- Other variables are number and quality of review reports, impact factor and scientific field

Pearson correlations between journal characteristics and duration of desk rejections and first review round

	Duration desk rejection	Duration 1st review round
Duration desk rejection	-	0.274***
Number of review reports	-0.042	0.031
Quality of review reports	0.036	-0.111*
Impact factor (log)	-0.217***	-0.304***
Average rating of journal	-0.142**	-0.360***

**OLS regression with duration first review round as
dependent variable**

	B	se(B)	Sign
Intercept	6.957	0.746	0.000
Duration desk rejection	0.037	0.009	0.000
Number of review reports	0.315	0.138	0.024
Quality of review reports	-0.598	0.153	0.000
Impact factor (log)	-0.809	0.242	0.001
Natural Sciences/General	Ref		
Medical Sciences	-0.701	0.328	0.033
Social Sciences & Humanities	0.918	0.346	0.008

Conclusions

- Duration of immediate (desk) rejection positively associated with duration first review round
- Journals with higher impact factors are quicker with regard to desk rejections as well as first review round
- Journals with shorter desk rejections are rated higher on overall quality of the experience by authors who are not desk rejected
- First review round slower for journals with on average more review reports and quicker for journals with better rated review reports

Hence quality of journal processes seem important for the duration of the process



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Thank you!

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