Practicing peer review - how excellence is constructed in peer review panels

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Peer review panels

Peer review panels: informed scientists evaluate their peers’ merits / excellence in the process of grant allocation

Widely accepted instrument for evaluating excellence / for selecting the most excellent researchers to allocate research grants

Hardly known what exactly reviewers evaluate: “open the black box of peer review” (Lamont 2009)
-> How is excellence constructed in practice?
Evaluating excellence

- Meritocratic excellence: allegedly neutral, objective indicators: publications, citations, impact points, memberships, grants

- What is perceived as excellence differs by discipline, cultural background, depends on: WHO evaluates WHOM based on WHAT? => Excellence is socially constructed

- Gender critique: Evaluation of excellence reflects imbalances / gendered power structures of science system: less are women gate-keepers, women have less network-ties = less cooperations/ less citations, lower self-promotion (Husu 2001, van den Brink/Benschop 2012, Rees 2011)

  => Excellence is more difficult to gain for female applicants
Evaluating excellence: ERC

ERC as case: “Scientific excellence is the sole criterion on the basis of which ERC frontier research grants are awarded”

Excellence of the Principal Investigator

| Independence | Groundbreaking | Beyond the state of the art |

Independence at ERC:

- one sub-element of formal ERC definition of excellence: “To what extend does PI show evidence for independent creative thinking?”
- one formal indicator: applicants should have “at least one important publication with out the supervisor”

=> How is independence practiced in ERC peer review panels?
Practicing independence

• Research questions: How are ERC peer review panels practicing independence? (How) Is this gendered?

• Data: Interviews with ERC Starting Grant 2014 panel members (n= 32, 14 women, 18 men), LS panels mainly

Theoretical references:

• “Practicing refers to literal ‘saying and doing’ in real time and space” (Martin P. Y 2006: 259).

• Grounded Theory (Glaser & Strauss 1967): Which concepts become apparent from the data?

⇒ 5 sub-dimensions that we reconstructed from interview data, when reviewers talk about independence
Independence depends on dependence (1)

“\textit{You’re not less independent as a female, just because you still co-publish with either your PhD or Postdoc supervisor than if a male would do it. There is no difference. But that is clearly seen upon as differently. And the males come out much better than the females in that aspect.}”

(reviewer 19, woman)

- Homosociality (men prefer men), similarity/trust: more male supervisors/mentors = more support for male scientists (Kanter 1977): reproduce masculine power structure
- Male and female scientists assess female juniors lower (Moss-Racusin et al. 2012)
- dependence structures privilege men: support is differently available and assessed for women
Independence needs to be negotiated (2)

“The supervisor doesn’t want any competition. This competitiveness is still very dominant.
And perhaps women think that they don’t want to work against their former boss. And men think: ‘I will show him!’
Women are perhaps less brutal negotiating [for independence].”

(Reviewer 1, women)

• Competition between (junior) scientist and supervisor: need to negotiate independence
• Independence depends on negotiation power
• Negotiation power is perceived as male
• Assumptions about how women and men are in general become relevant (= gender stereotypes)
Independence requires topical emancipation (3)

“I think we have a large number of incredibly selfish individuals who are incredibly successful in science. But that’s because they’re very selfish. They don’t do anything unless there’s something in it for them...

My impression is that women tend to be more team players, and therefore they take on a higher percentage of roles within the department that lead to a successful department as a whole rather than success of them individually”.

(Reviewer 4, woman)

- Men are perceived as more selfish = more independent
- Women are perceived and evaluated as more team-oriented = less independent
- Individual emancipation is assumed as more male => is less checked for male applicants!
Independence requires a new developed network (4)

„She has not really established those collaborations yet ... all her collaborations were people who’d been collaborating with her big boss, where she’d picked up his existing network.“

(Reviewer 1, woman)

- Collaboration with supervisor is perceived as dependence/hierarchy
- but: Long-term collaborations may enhance mutual trust and stimulation → new research ideas → more excellent research
- Networks are more difficult to establish for females: less time, ‘old-boys-networks’: women are no full members
Independence is linked to mobility (5)

“Women don't move as soon and as long as men to another country to make part of their research there. At the same time I noticed that some men have never moved out of their university (...). They start their PhD at the same university... And they also become professors at the same university. And everybody finds that they have an excellent CV. And for women it is sometimes mentioned that she didn't go abroad for her PhD or after her PhD.”

(Reviewer 32, woman)

- Male life context favors mobility for male scientists
- Criterion is not questioned for male applicants: criterion dropped!
- Double standards = suboptimal evaluation practice
Findings: gendered independence

• Funding agency: does not provide specifications / guidelines to evaluate independence

• Reviewers: To construct independence, reviewers apply a set of sub-dimensions which are interlinked and combined for individual concepts of independence.

• Independence is constructed subjectively = independence is vague, ductile and fluid. Gender is inscribed in various sub-dimensions of independence.

• Peer review panels:
  • negotiate independence: Which is dominant concept?
  • discuss independence unsystematically: Independence more questioned for female applicants, less questioned for male applicants (naturally given)
  • Some panels do not discuss independence at all
Conclusions

• Excellence /independence should be more specified: how to apply sub-elements of excellence in practice „Panel members had no problem in pointing out criteria, but they had problems explaining how they use these criteria for judging scientific quality”. (Langfeldt 2004: 57)

• More precise indicators needed to measure and compare criteria for excellence: better reliability and validity in grant allocation process, more fairness:
  • Facilitates work of reviewers
  • Enables applicants to prepare in the best way

• But: standardisation is needed to increase transparency and effectiveness in the selection process, but has limitations.
Thank you!

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Project summary: