
gendERC – gendered dimensions in ERC grant selection: Construction of Scientific Excellence

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gendERC project

- gendERC consortium:

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- Project time: 04/2014 - 02/2016

- Aim of gendERC project:

- **understanding** the sources of bias and the review process in order to

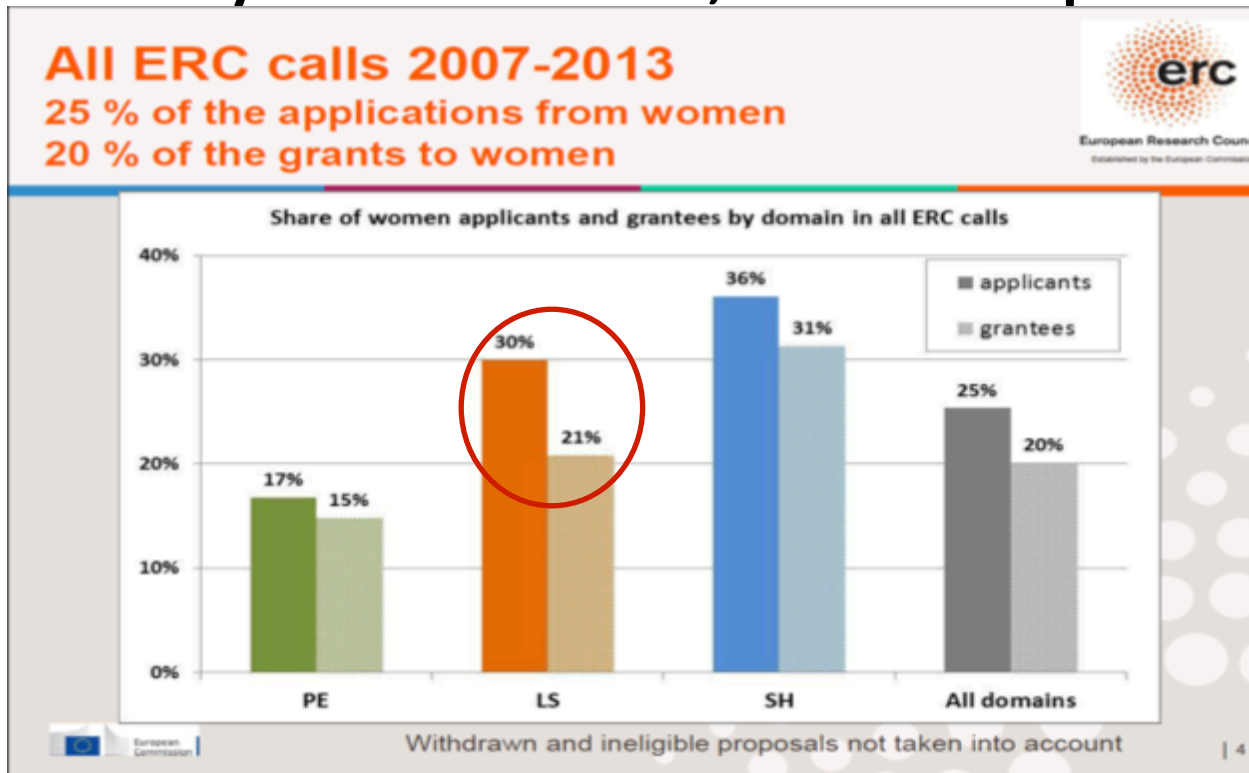
- **improve transparency** in selection procedures and help

- **select the most excellent** female and male researchers

StG 2014 as case to study

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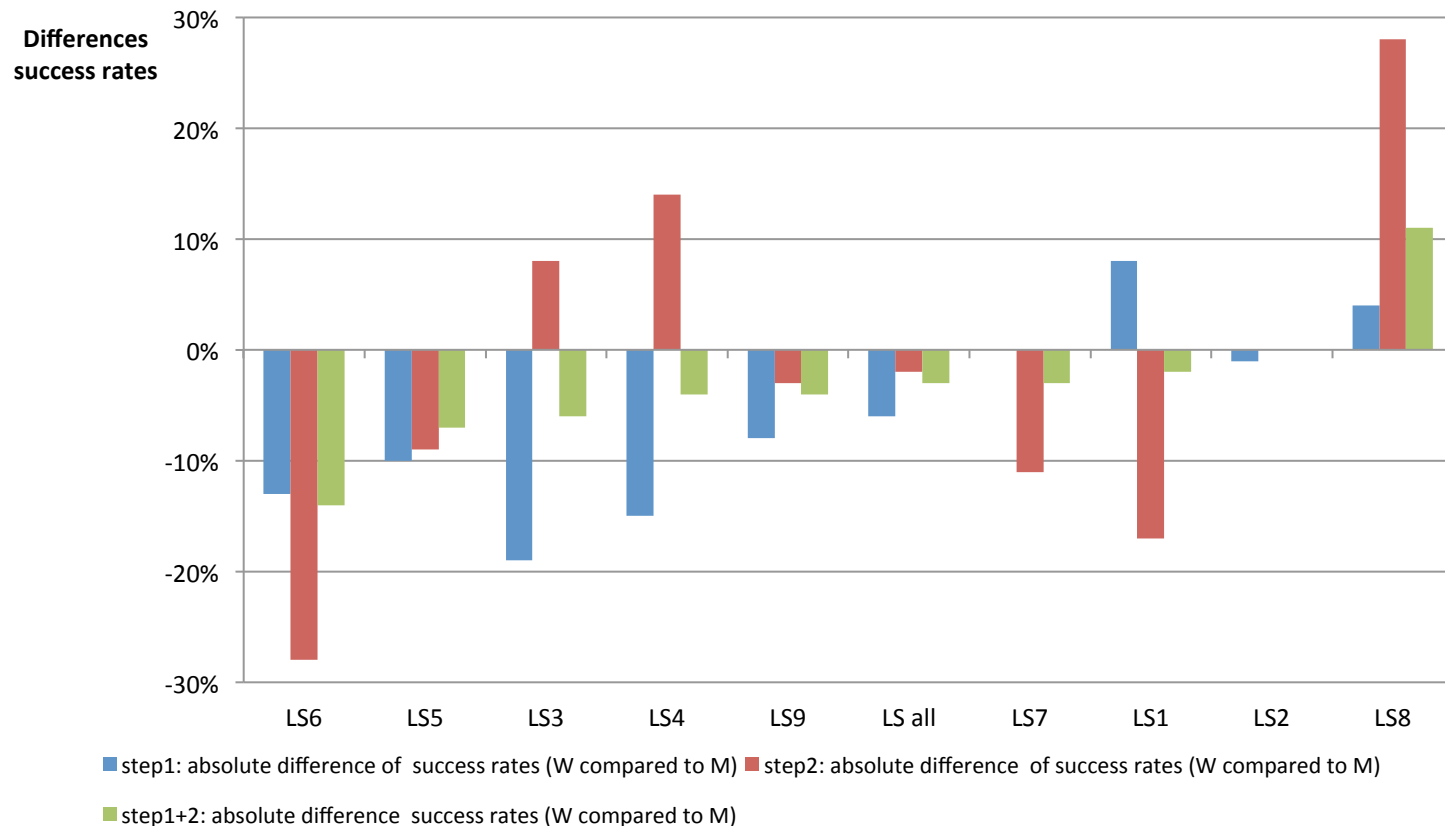
Scope of analysis: ERC StG 2014, Life Science panels (LS) studied



Share of female applicants and grantees per domain in ERC Starting Grants calls (2007 - 2013), Source: EC 2014

StG 2014 LS panels: success rates by step

Success pattern differ by panel: success rates in step1, step2, step1+2



Why excellence?

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“Scientific excellence is the sole criterion on the basis of which ERC frontier research grants are awarded” (ERC Work Programme)

- What is seen as scientific excellence? (How) is this gendered?
 - by ERC: **formalisation** of criteria
 - by panel members: **practicing** of criteria
 - by applicants: **perception** of ERC excellence
- Research approach: excellence is socially constructed, but: peer review needs to be based on personal judgement.

*“Excellence means nothing; excellence is a construction that helps to do **whatever you want**” (panel member) ???*

Approach to analyse ERC excellence

ERC documents analysed

Linguistic analysis: **Evaluation reports** (n=3.030): which words are used to assess excellence of applicants (by sex)?

Interviews ERC StG 2014 panel members (n= 32, 14 F) incl panel chairs, interviews ERC (ScC, SOs, n=16)

Formalisation of criteria

Practicing of criteria

in general

in general

by gender

by gender

Landscapes of excellence

ERC (StG 2014) formal criteria for assessing scientific excellence

Excellence only!

Principal Investigator (PI)					research project			
Intellectual capacity, creativity, commitment					Groundbreaking nature and potential impact of the research project			Scientific approach
ERC CRITERIA	Ability for ground breaking research	Evidence for independent thinking	Research achievements beyond the state of art	Commitment (time)	Addresses important challenges	High risk/high gain	Goes beyond the state of art	Feasibility + methodology
ERC INDICATORS	?	At least 1 important publication without PhD SV		50% Time commitment		?		
Scores: 4=outstanding, 3=excellent, 2=very good, 1=non competitive; by each panel member for each criterion								

Source: ERC Frontier Research Grants Guide for Peer Reviewers (WP 2014)

Formal excellence criteria: general assessment & general practicing

- Lack of (clear) indicators which can be measured and compared:
 - Practicing: panel members use very **different indicators** to assess, e.g. independence: publications (single author, last author), own funding budget, team composition, motivation, topical distance to supervisor, different home institutions, establishing new research collaboration: => **when independence is assessed, different achievements are assessed**
 - Lack of specification of the relevance of each criterion/indicator:
 - Practicing: rarely all criteria are addressed ('egg-laying wool-milk-pig')
 - **Different criteria** are weighed as **most important** by different panel members
 - Informal criteria (not formalised) are used: mobility, host institution
 - Lack of gender related criteria (see H2020 gender in research content)
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excellence criterion ,independence': gendered **assessment**

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- Source for assessment: literature, also interviewees!
- Panel members question ERC criteria/indicators, based on their **own research experience** and/or on **gender stereotypes**:
"They were women and maybe they were less good at arguing with their SV and saying "I need to look more independent. I need my name alone on my paper. Nobody's going to believe me if my name isn't alone". (panel member, F)
- 'publication without SV' may not tell about independence, but about team dynamics: More assertive researchers insist on publishing without SV. These researchers are more often men. Consequently men more often, women less often publish without SV.
- **What does this tell about the applicant's excellence?**

excellence criterion ,independence': gendered **assessment**

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- Not independence (as criterion for excellence) is assessed, but assertiveness or competition: *“Women are perhaps less brutal negotiating [for independence].”* (panel member, F)
“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!’.” (panel member, F)
- Indicator reflects inequalities originating from before the application: if this indicator is applied equally it disfavours women = indicator is gendered!!
- **Gendered** indicators reflect women’s excellence less!

excellence criterion ,independence': gendered **practicing** by panel members

Criteria are applied differently to female and male applicants!

- Panel members **check criteria/indicators more** for female applicants (and not/less for men): shifting standards
- women's independence is more questioned than men's:
*"It's more of a trademark for independence for female than for male. 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**. But that is clearly seen upon as differently [by other panel members]. And **the males come out much better** than the females in that aspect"* (panel member, F)
- 'Dependent' male researchers are favoured; same for mobility.
- Context-related: *"A woman with 2 kids who performs equally should get the grant"* (panel member, M)

Applicants' perception of ERC excellence

- Source: gendERC applicant survey, n=1.227 = response rate >40%

*“Throughout the application process I was continually told to “big myself up”, using superlatives and hyperbole to describe my achievements. I **didn't feel very comfortable** with that and I don't think it comes naturally to many female applicants (possibly **not to many male applicants either**, though)” (applicant F).*

*“To succeed at ERC, high level of self-promotion, elbow mentality, self-confidence and strong support by former supervisors helps a lot. Men are **more frequently behaving** in this pattern and **it is more accepted** if they do so” (applicant F).*

Applicants' perception of ERC excellence

- Source: gendERC applicant survey, n=1.227 = response rate >40%

“Based on my personal experience as a man and conversations with both men and women, my guess would be that the entire concept of competition-based performance under severe time pressure works to the advantage of men” (applicant, M).

*“Having to sell this entire team project as if it was MY OWN, as if I was a 'leader' when in fact I'm always **collaborating and learning** from everyone. I guess this is also a woman thing. It's really a perception. But an important one. I would have much rather said that x will do this, and y will do that, rather than 'I will deliver x...y,...’” (applicant, F)*

- Applicants perceive that ERC looks for excellent researchers with traits more attributed to male applicants, female applicants feel fitting less to this construction of ERC excellence
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Findings

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Gender bias in construction of excellence (criteria) may be due to:

- a general lack of formalisation of criteria/indicators: gives room for different practicing based on personal excellence **concepts**
- formalised criteria/indicators can be gendered, reflecting gender differences before application (position in science system, time) and fitting better to measure a masculine way of doing science
- Criteria are applied differently to female applicants
- ERC language may ,attract‘ male applicants more
- Personal bias (professional bias, stereotypes, norms) plays a role in how excellence is constructed by individual panelists (panels)

Conclusions

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- More awareness of the gendered character of excellence criteria could help reduce gender differences in success rates!
- ERC-level: by rethinking formalisation of criteria: how much should be left to the individual choice of the panel members?
 - Specify formal criteria including appropriate (measurable, comparable) indicators and make them transparent and well known
 - Fix relative weight of criteria/indicators
 - Formalize responsibility for transitive use of criteria (each criteria for each applicant): panel chair? SO?
- Panel members: by being aware that professional culture, personal experiences, societal norms,... are part of peer reviewing: make them conscious, link them to formal criteria

Thanks for the attention!

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gendered practicing

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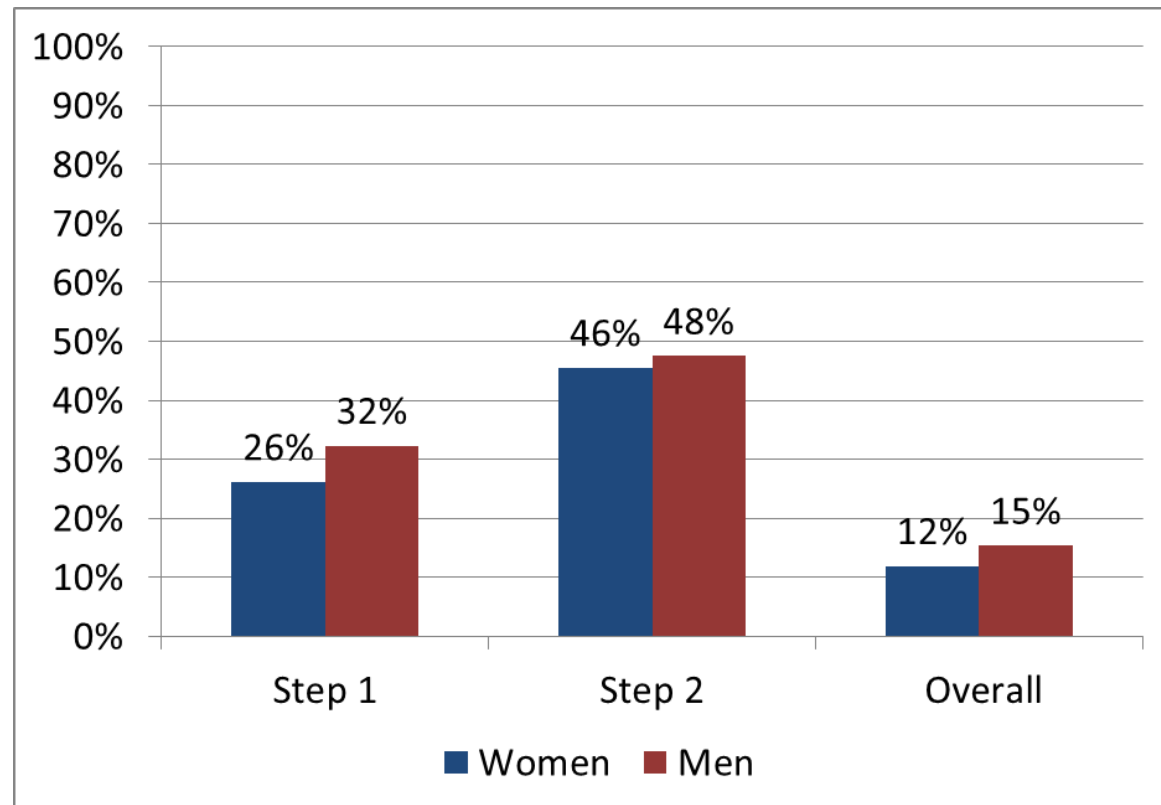
■ Different standards for female applicants (2) : Mobility

*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.*

StG 2014: Success rates of women and men in LS

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Graph: Success rates of female and male applicants in StG2014 in LS domain differentiated by evaluation phases



Source: ERC StG 2014, own calculations

gendERC: the project

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Steps of analysis

- (1) Policy Analysis: are processes gendered?
- (2) **Past performance** (PP) control: is female applicants' PP lower?
- (3) Panel composition and network ties (cognitive distance): more female panel members (40%) = more female grantees?
- (4) **How is excellence constructed (formally and in practice)?**
- (5) How are decisions made in panels?
- (6) Peer review (multi logic model): Which factors explain success?
- (7) Recommendations for improving the process