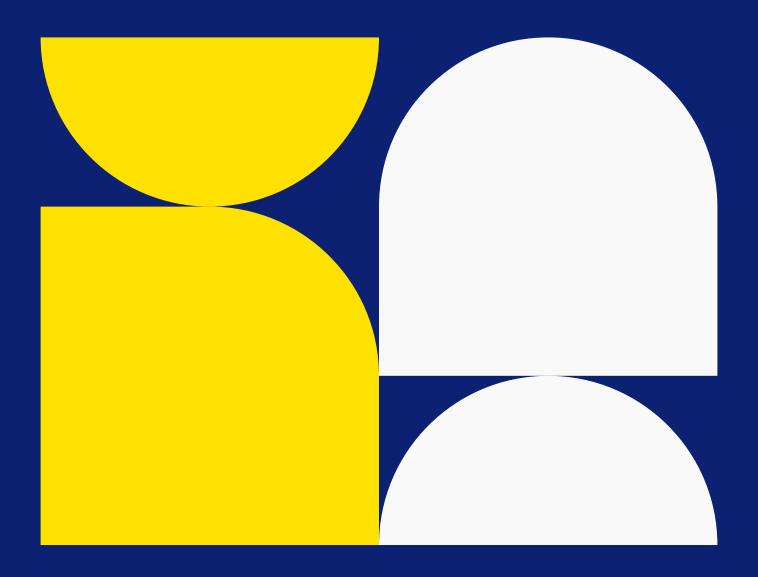
A gender-equal process

A qualitative investigation of the assessment of research grant applications 2023





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Contents

Foreword	5
Summary	6
ntroduction	8
Gender equality observations: background	8
Not just gender equality observations	
Structural inequality in the research system	
Gender equality work in the internal processes and implementation of	
previous recommendations	.11
About equality and gender equality	
Method	
Observation as a method	.14
Implementation	
Sample	.16
Integrity and ethics	.16
Method for measuring speaking time	.17
Gender equality observations in other and similar circumstances	.17
• •	
General information about the implementation of assessment of	
applications	.20
Brief description of the assessment process	.20
Assessment criteria	
Observations	.23
Digital meetings predominate	.23
Professional leadership and friendly atmosphere	.23
Lack of time	.24
The varying posititions of the senior research officers during meetings	.24
The panel interaction often works well	.25
but sometimes the interaction is less good	.25
Designation of the applicant	
The gender of the applicant is hidden	
Assessment and grading	
Preliminary grades and average grades	
Assessment of applications and applicants	.29
Assessment of competence and merits: great variation between panels	
within different research fields	
Medicine and health	
Humanities and social sciences, and educational sciences	
Natural and engineering sciences	
Different forms of bias	
Assessment of applications from junior researchers	
Is it a merit to have grants from other funding bodies?	
Informal (irrelevant) information	
Awareness of gender equality and gender issues	
Assessing gender perspectives	.40
Grounds for discrimination other than gender	.40

Recommendations	41
Make room for reflection on equivalent and objective assessment	41
Continue informing about the importance of not adding informal informa	
	41
Continue to emphasise instructions and guidelines	42
Continue to highlight the issue of assessment of competence and merit	42
References	43
Vetenskapsrådet	44
Published	44
Not published.	45

Foreword

One of the principal tasks of the Swedish Research Council is to allocate grants to basic research of the highest quality. Gender equality is a quality issue for the entire research system, and the Swedish Research Council has been mandated to promote gender equality between women and men within its own area of activities. For several years, the Swedish Research Council has built up knowledge about how the work towards increased gender equality in conjunction with research funding can be conducted. One tool used by the Swedish Research Council is gender equality observations.

Since 2012, the Swedish Research Council has regularly carried out gender equality observations. The observations scrutinise, from a gender equality perspective, the meetings where subject experts discuss applications for research grants received by the Swedish Research Council. These meetings are a central part of the Swedish Research Council's process for allocating research grants. The purpose is to investigate whether there is further potential for improvement in terms of procedures, instructions and other aspects that promote gender-equal assessment of grant applications. The observations result in recommendations. Over the years, these observations have been important in the Swedish Research Council's day-to-day work on developing its assessment processes.

The observations made in a selection of review panels cannot be generalised and be considered to apply for all panels. Nor is the purpose to prove any causality. The purpose is to develop documentation for discussion and learning about quality improvements to the process.

Gender equality in the allocation of research grants is an important goal that requires a long-term approach and continuity. This report provides good documentation for the Swedish Research Council's continuing discussions and contributes to the work on further improving the quality of the Research Council's processes.

Stockholm, 13 May 2024

Katarina Bjelke Director General, Swedish Research Council

Summary

During autumn 2023, the Swedish Research Council conducted gender equality observations in fourteen review panels¹, to investigate how the processes function from a gender equality perspective. The method used does not provide any basis for making generalisations. The purpose is to develop documentation for discussion and development that can contribute to quality improvements in the Swedish Research Council's processes.

This is the eighth time the Swedish Research Council has conducted gender equality observations, aimed at investigating whether it is possible to improve procedures, instructions and other aspects that promote gender-equal assessment of grant applications. The Swedish Research Council has already implemented several of the recommendations made in conjunction with previous gender equality observations. This, together with other development work, has resulted in improvements to the Swedish Research Council's procedures.

A difference compared to previous gender equality observations is that, of the fourteen panels, half were selected by persons in the organisation's management, which underlines that the intention is to produce documentation for discussion and quality development.

The discussion climate and collaboration in the review panels are characterised by great engagement and interest, and this applies to gender equality issues as well. When the assessment leads to gender inequality, the observation material shows that this is probably due to too strong a focus on the applicant's accumulated merits. This favours senior researchers, a group dominated by men.

Emphasising competence and merits is common in the research field of medicine and health, and this is probably linked to the difficulties of achieving a gender-equal outcome within the field, which has been emphasised in several previously published gender equality observations. A similar challenge exists in the field of educational science.

The Swedish Research Council's assessment processes are constantly being developed, which benefits both the operation and gender equality. In conjunction with the 2023 observations, a relatively new procedure was noted, with pause meetings introduced at pre-arranged times. Within the framework for these, the chair, vice chair, observer, and Swedish Research Council personnel can discuss how situations arising can be handled. The gender equality observers believe that these pause meetings raise the quality of the processes.

¹ The Swedish Research Council calls its teams of application assessors "review panels". The review panels consist of prominent researchers who assess the grant applications received.

The report includes issues that have also been recognised previously, for example that the Swedish Research Council needs to clarify to the panel members how the assessment shall be done when researchers have grants from several funding bodies. This is a gender-related problem. For a man with ongoing research grants from other funding bodies, this could be assessed as being a strength, while in the assessment of an application from a woman, this could be assessed as a weakness or a failing.

Another issue that may need recognising is whether it should be emphasised more clearly that the panel members shall take into account deductible time; that is, the rule that exists to take into account "active research years" when assessing the scope of the scientific production.

The report ends with four recommendations aimed at the Swedish Research Council.

Introduction

Gender equality observations: background

During 2023, the Swedish Research Council conducted its eighth set of gender equality observations. This time, fourteen review panels were observed, to investigate whether there is further potential for improvement in terms of procedures, instructions and other aspects that promote gender-equal assessment of grant applications.

The Swedish Research Council's gender equality observations have been considered as ground-breaking², not just in Sweden but also internationally.³ To begin with, we want to provide some background and context for this task.

The allocation of research funding is an important matter that links into Sweden's overall gender equality policy objectives, one of which is an even distribution of power and influence. Another is financial gender equality: women and men shall have the same opportunities and conditions in relation to education and paid work. These two goals are relevant to the Swedish Research Council, as the financing of research involves both decision-making and allocation of financial resources. Researchers awarded grants by the Swedish Research Council are given the financial preconditions to pursue their ideas and, in some cases, this also means that the researcher is able to secure their own employment and make progress in their research career. It can also be accompanied by a certain boost to the researcher's reputation and, by extension, their influence in the field, because of the high symbolic value associated with the award of research grants from a government funding body.

Not just gender equality observations

The Swedish Research Council has been working with gender equality in several ways for many years. The Swedish Research Council's Directive states that the Council shall integrate a gender equality perspective in its operation and promote gender equality in the allocation of research funding.⁴

The Swedish Research Council has the role of adviser to the Government on research policy issues, and therefore also carries out analyses at system level. In 2021, the study "How gender-equal is higher education? Women's and men's preconditions for conducting research" was published. The purpose of this study is to investigate and analyse the differences between the career developments of

² Liisa Husu och Anne-Charlott Callerstig: Riksbankens jubileumsfonds beredningsprocesser ur ett jämställdhetsperspektiv RJ 2018, p 6.

³ The Swedish Research Council is regularly contacted by funding bodies, higher education institutions, and organisations asking for information about the methods and so on, often for the purpose of carrying out similar studies.

⁴ Förordning (2009:975) med instruktion för Vetenskapsrådet, SFS 2009:975.

women and men, and also to investigate how the conditions in higher education are perceived by women and men. Highlighting the conditions in higher education from a management and employer perspective is also part of the study. The Swedish Research Council has been invited to present the report to representatives of Swedish higher education institutions and other organisations.

The study shows that the route to becoming a professor is not gender-equal in any scientific field. One example of this is that, even when the gender distribution is equal among newly appointed professors in several scientific fields, this does not reflect the recruitment pool. The proportion of women in the recruitment pool is just over ten per cent higher than the proportion of newly appointed professors who are women. Even in natural and engineering sciences, where the proportion of newly appointed professors who are women is low, the proportion of women in the recruitment pool is higher than among those newly appointed. The study also shows that, in all scientific fields, women face more challenges than men do. The study also establishes that women to a greater extent than men are active in research fields with few professors, which is interpreted as the opportunities to gain merit in research terms are limited, while men to a greater extent are active in fields with a higher proportion of professors, which is interpreted as there being greater resources for research in these fields.⁵

During 2018, a study was carried out relating to gender equality in the Swedish Research Council's previously implemented excellence initiatives and research environment support. The focus was on gender proportions for applications and success rates for men and women respectively. The excellence initiatives included initiatives aimed both at established researchers and at junior researchers. The study shows that both women and men were awarded support for excellence, and were part of the research environment support in proportion to the gender distribution of the applications. The Swedish Research Council's assessment process therefore appears not to have disadvantaged either men or women as groups. It also shows that the result of the excellence initiatives and research environment support has gone to considerably more men than women, which correlates to there being considerably more men than women who apply for these forms of support. This can in part be explained by women still being in a minority higher up in the hierarchy among researchers, where the target groups for these forms of support are mainly found. The report draws the conclusion that initiatives with support for more senior excellent researchers therefore has the consequence that a larger proportion of research funding is awarded to men than to women.6

The Swedish Research Council publishes annual statistics on the number of applicants and number of approved grants divided up by gender. The Swedish Research Council often participates in international groupings focusing on issues relating to gender equality. The development programme "Jämställdhetsintegrering i myndigheter (JiM)" ("Gender equality integration in

⁵ How gender-equal is higher education? Swedish Research Council 2021.

⁶ Jämställdhet i Vetenskapsrådets miljöstöd och excellenssatsningar. Utfall av utlysningar gjorda 2004–2016. Vetenskapsrådet 2018.

public agencies") started in 2013, and in 2023 covered a large number of public agencies, including the Swedish Research Council.

The Swedish Research Council's policy for gender equality integration underlines that research benefits when both women and men participate and apply their expertise and experience. According to this policy, the Swedish Research Council's work with gender equality shall permeate all activities, which includes ensuring that the gender equality perspective is included when decisions are made, at all levels and at all stages.⁷

The Swedish Research Council also has guidelines for gender equality in the review of applications for research grants. According to these, the Swedish Research Council shall achieve and maintain an equal gender distribution in its review panels, ensure that women and men have the same success rates and receive the same average grant amounts, taking into account the nature of the research and the support form, and recognise and prevent unconscious bias and preconceived ideas based on gender when allocating research funding.

During 2024, the Swedish Research Council has developed the guidelines so that when there are large differences between the number of applications of either gender to the review panel, which means that individual applications may affect the success rate greatly, an exception may be made from the goal of achieving the same success rate on condition that the gender with fewer applicants to the review panel is not disadvantaged. This can be done for the purpose of promoting gender equality in the field as a whole.⁸

Ultimately, the Swedish Research Council's work towards increased gender equality is about creating the same opportunities for female and male researchers.

Structural inequality in the research system

One question is whether the Swedish Research Council's set criteria and indicators contribute to reproducing structural patterns, with specific reference to the issue of merits? In its assessment process, the Swedish Research Council has to deal with the structural inequality that exists in academia, where the majority of professors are men. Women are lacking in particular among the most senior professors. Equalisation between women and men employed as professors is happening gradually; in the most recent doctoral degree award cohorts, the distribution of women and men at professor level is relatively even. But if seniority is "rewarded" by giving the researcher's overall competence and merits great weight in the assessment of an application, this can favour men as a group.

⁷ Vetenskapsrådets policy för jämställdhetsintegrering 1.2.4-2022-06681.

⁸ Riktlinjer för jämställdhet i processen finansiera forskning 1.2.4-2024-00116.

⁹ How gender-equal is higher education? Swedish Research Council 2021. See also The Swedish Research Barometer, Vetenskapsrådet 2023, Figure 23, showing research and teaching personnel (individuals) with doctoral degrees, according to doctoral degree award year, employment category, and gender, divided up into different research fields and years.

How the issue of competence and merits is dealt with in the Swedish Research Council's review processes is therefore a question that is of relevance to gender-equal allocation of research grants.

The assessment of researchers' merits plays an important role in the development of the research system, and this has entailed that several initiatives have been taken at EU level to drive development of how merit assessment is done. The Coalition on Advancing Research Assessment (CoARA) is one example of this. In 2021, the European Commission consulted European organisations about the question of how a change could be implemented. The goal of the change can be summarised as "promoting good research culture". This might relate to open publication ("open access"), increased diversity, and increased gender equality. The route to reaching these goals goes via developed assessment that can take into account alternative career paths and a wider scope of merits than is often the case at present.

Gender equality work in the internal processes and implementation of previous recommendations

The Swedish Research Council is continuously developing the format for its review processes. The intention of the gender equality observations is to support this work. Previous reports, and also this one, contain recommendations for the Swedish Research Council. Several of the previous ones have contributed to improving the Council's internal work.

Below are some examples of how the Swedish Research Council is working with gender equality in the review processes. The footnotes contain references that describe if and when there has been a recommendation concerning this procedure, to show how recommendations from the gender equality observations have been implemented.

The Swedish Research Council informs all those who participate in its review processes about how important gender equality is to the assessment. This information is communicated both in writing and orally. The written information is provided in a 'review handbook'. Each scientific field has a specific review handbook, and this also contains information about gender equality aspects. For example, the review panels shall report the outcome from a gender equality perspective and, if this is justified, provide comments on the outcome.¹⁰

In addition to the written information, oral information about the Swedish Research Council's gender equality objectives is also provided to the review panels in conjunction with various forms of preparatory meetings or at the start of the review panel meeting. For example, personnel taking part in review panel meetings often include an item about the importance of gender equality in the

¹⁰ A review of the review handbooks for the research fields included in the study shows that the instruction is included in all of them.

review. All personnel undergo in-house training that includes gender equality aspects.¹¹

The roles of the Swedish Research Council personnel (research officer and senior research officer), the review panel chair, and review panel members have in several cases been clarified.¹² In-depth introductions, case-based workshops and similar have been arranged by the Swedish Research Council. In several scientific fields, the Swedish Research Council has chosen to emphasise the responsibility of the review panel chair for how the meetings are conducted.¹³ There is a strategic seating plan for the review panel members who take part in person in the Swedish Research Council's review panel meetings, with the aim of creating a good discussion climate.¹⁴ "Strategic" in this context means taking into account gender and other aspects, such as experienced/inexperienced reviewers, the geographic origin of reviewers, and any linguistic/cultural distance.

A critical aspect recognised in previous reports is that individual members share information that shall not be part of the assessment ("informal or irrelevant information"). This issue is now raised as an information item, where the Swedish Research Council describes the type of information that shall not be passed on during or in conjunction with meetings. This information is also included in the review handbooks. This is because informal or unconfirmed information about the applicant or the research team can impact on the assessment.¹⁵

"Calibration" of the grades is done ahead of each meeting, by the senior research officer presenting a graph or a table of how the reviewers have used the grading scale ahead of the panel meeting, as a reminder that the grading scale is not a tool used in exactly the same way by all reviewers.¹⁶

Previous gender equality observations have noted that panel members within medicine and health in particular place great importance on the researcher's

¹¹ "Knowledge about gender and assessment should increase among all those who contribute to the review process", recommendation in Jämställdhetsobservationer i fyra beredningsgrupper 2011, Vetenskapsrådet 2012, p 6, Jämställdhetsobservationer i ett urval av Vetenskapsrådets beredningsgrupper 2012, Vetenskapsrådet 2013, p 14. The recommendation was repeated, with slightly different wording, in 2015: "The Swedish Research Council should revise the instructions and the information provided to reviewers when recruiting from a gender equality perspective." A gender-neutral process? Swedish Research Council 2015, p 23.

¹² Recommendation in Jämställdhetsobservationer i ett urval av Vetenskapsrådets beredningsgrupper 2012, Vetenskapsrådet 2013, pp 14 and 15. See also A gender-neutral process? Swedish Research Council 2015, pp 20 and 22.

¹³ Recommendation in A gender-neutral process? Swedish Research Council 2015, p 22.

¹⁴ A gender-neutral process? Swedish Research Council 2015.

¹⁵ A gender-neutral process? Swedish Research Council 2015.

¹⁶ Recommendation in Jämställdhetsobservationer i ett urval av Vetenskapsrådets beredningsgrupper 2012, Vetenskapsrådet 2013, p 14. See also A gender-neutral process? Swedish Research Council 2015, p 24.

competence and merits, which may result in men as a group being favoured.¹⁷ Now, panel members are informed via the review handbook that, for the majority of grant forms, the emphasis shall be placed on the scientific quality of the proposed research project.

Overall, the Swedish Research Council's processes have gradually developed towards increased harmonisation, which according to previous gender equality observations may contribute to increased transparency and also equivalent and gender-equal assessments. 18 "Transparency" refers to the assessments being based on clear indicators that create equivalence in the assessment, not on assessments where the indicators differ between panels, where different measures are used for women and men, or where informal information is used to assess an application.

About equality and gender equality

The focus of this report is gender equality. The aim is to investigate whether men and women have the same preconditions and opportunities to receive research grants. This issue is not disconnected from the broader concept of equality, however. It is not only gender that can influence an assessment process; other relationships of superiority and inferiority between different groups in a society can also impact on the assessment. These may, for example be the other statute-controlled grounds for discrimination, which are: ethnic background, gender identity or expression, religion or other faith, functional disability, sexual orientation, and age. But it may be about other factors, such as academic rank, being part of a certain research discipline or school formation, educational institution affiliation, geographic origin, or language. All those mentioned interact with each other, and it is rarely possible to scrutinise one category without taking other categories into account. The project team has been aware of this, and tried in its work to take account of how other categories than gender also can lead to bias in the assessment and/or create hierarchies.

All panel members, irrespective of gender, carry perceptions about gender and other relationships of superiority and inferiority between different groups. Men and women who apply for research grants, and who do not belong to the academic norm (or the standard image of a researcher), could be disadvantaged if such perceptions are expressed in and influence the process. This means that all persons taking part in the assessment of applications have a responsibility to contribute to a well-functioning process by adopting a reflective and critical attitude towards their task.

¹⁷ A gender-neutral process? Swedish Research Council 2015, p 24. A gender-neutral process? Swedish Research Council 2017, p 25.

¹⁸ A gender-neutral process? Swedish Research Council 2015, p 21.

¹⁹ Diskrimineringslagen 2008:567. Read more at Diskrimineringsombudsmannen (DO)

Method

The following section will describe briefly the background and method of the methodological approach used in this analysis. Gender equality observations and their follow-ups and analyses with a statistical focus together provide a broad picture of gender equality and research funding, and form central tools for implementing the Swedish Research Council's gender equality strategy. The observation studies focus more closely on a specific aspect, namely the review panel meetings, which are central to the process that determines which projects receive funding.

During 2023, the Swedish Research Council conducted its eighth set of gender equality observations at the meetings of fourteen review panels. The project manager and author is Lisbeth Söderqvist, Senior Analyst at the Swedish Research Council. The team that carried out the observations included Emelie Adamsson and Maria Starborg, Senior Research Officers, and Richard Andersson and Anni Järvelin, Senior Analysts, all from the Swedish Research Council. The observer group also included Johanna Andersson, FD in Religious Studies with a focus on gender. Johanna previously worked at Chalmers University of Technology and was part of the team that did the very first observation study for the Swedish Research Council in 2011. Since then, Johanna Andersson has also participated as an observer in most gender equality observations.

Observation as a method

To collect information on how the review panel meetings function, the Swedish Research Council uses the participant observation method. This is an ethnographic method, where the observer studies a group's activities, language, conversation culture, and social interaction, in real time. Participant observation of different processes is used frequently in fields such as educational sciences, but also in sociology of science and technology, and in technology and science studies.²⁰

Participant observation is a method that makes it possible for observers to capture how a group interprets and understands its task, communicates, prioritises, and argues. There are challenges in using the method: it can be difficult to see patterns in what is usual and familiar, and our perception is also selective. There is also always a risk that the observers make subjective interpretations, or incorrect interpretations.

The observation phase is followed by an analysis phase, when recurring themes in the material collected are identified, but an initial analysis is carried out already during the observation phase itself. This is done by the observer taking notes that are not just descriptive, but also reflective. At the final stage, a text is

²⁰ Idar Magne Holme & Bernt Krohn Solvang Forskningsmetodik. Om kvalitativa och kvantitativa metoder, Lund 1997.

created where identified and recurring themes together form a coherent description and analysis.

One of the starting points for the qualitative approach we use when making gender equality observations is that the actions of all actors is dependent on how they understand and ascribe meaning to the instructions and the situation they encounter in their task. For example, the panel members must interpret the instructions provided by the Swedish Research Council. The individuals' interpretation and use of the grading criteria and the review panel's dynamics therefore become central to the outcome.

Implementation

Our gender equality observations are of a type known as 'open observations', where the persons who are under observation are aware of this.²¹ This means that the observers' instructions include that they shall present the purpose of the observations to the group the observer is to observe, namely to develop the internal processes to achieve the goal of gender-neutral allocation of the Swedish Research Council's research grants.

A disadvantage of open observations is that the persons being observed, in this case review panel members, may be affected by being observed and consequently changing their behaviour. This could, for example, mean that they express themselves more correctly, and take greater account of gender equality aspects than if they had not been observed.

During the observations carried out during this round, most meetings were carried out in digital form, which leaves less room for non-verbal communication and informal discussions during pauses. At the meetings taking place in person, the observers were present in the meeting room and sat at the same table as the chair, panel members, other personnel at the Swedish Research Council, and representatives for the scientific council/committee. The seating plan also makes it possible for the observers to notice non-verbal communication in the form of body language.²²

The observer's presence will of course be noticeable for the persons taking part in the meeting and who know they are under observation. We have, however, still chosen to conduct open observations, as the alternative – not informing meeting participants that observations are made – is deemed to be ethically indefensible.

²¹ Idar Magne Holme & Bernt Krohn Solvang Forskningsmetodik. Om kvalitativa och kvantitativa metoder, Lund 1997.

²² Katrine Fangen Deltagande observation, Malmö 2005.

During the course of the observations, the observers were careful not to enter into discussions or make comments on the reviewers' work, as their task is only to observe the process.²³

The gender equality observers use a list or a template, based on previous years' observations, to note their observations. In general, these consist of capturing the indicators used to assess grant applications, and how well the assessment processes worked. To reduce the risk of observers remembering incorrectly, they review their notes and make fair copies as quickly as possible after the review panel meetings.

We make no claim that the observations made in a selection of review panels can be generalised and be considered to apply for all panels. Nor is the purpose to prove any causality. The purpose is to develop documentation for discussion and learning about quality improvements to the process.

Sample

During spring and autumn 2023, six gender equality observers monitored the assessment work in 14 of the Swedish Research Council's 97 review panels, which are tasked with assessing applications for research grants. Of the 14 panels observed, seven were in the research field of medicine and health, three in natural and engineering sciences, two in humanities and social sciences, and one each in educational sciences and artistic research. The reason for having more groups for the research field of medicine and health is because this field has had difficulty reaching the goal of gender-neutral allocation of research grants during a number of years.

There were practical considerations governing the sample, but the working group had concrete wishes this time also to take into account from the Swedish Research Council's secretaries general.²⁴ A total of seven of the review panels observed were proposed by this group. This makes it even more important to underline that the results of the observations cannot be generalised or be said to apply to all panels. As mentioned above, the purpose is to develop documentation for discussion and learning about quality improvements to the process.

Integrity and ethics

The review panels members are informed at the start of the review panel meeting of the purpose of the observations (that is, to develop the Swedish Research Council's processes with particular focus on gender equality), the type of

²³ Katrine Fangen Deltagande observation, Malmö 2005 and Idar Magne Holme & Bernt Krohn Solvang Forskningsmetodik. Om kvalitativa och kvantitativa metoder, Lund 1997.

²⁴ The secretaries general are part of the Swedish Research Council's executive management team, and initiate, drive, and follow up issues within their respective fields. The secretaries general are active researchers, and usually employed by the Swedish Research Council on a part-time basis for a maximum of six years.

information to be collected, and what this information would be used for. They are also promised anonymity.

To maintain the review panels' integrity, details of the review panels and panel members are excluded from this report. Quotes are reported in English so as to not give clues about which panel the quote comes from, and gender is not disclosed, unless it is of importance for the context, by using the pronoun "they" when situations are referred to, instead of "he" or "she".

Method for measuring speaking time

In previous observations, the observers measured speaking times for women and men. This time we have not done so, partly for practical reasons, but we have also noticed that the results of previous measurement do not show any clear gender differences. There are both men and women who find it easier or harder to speak out at meetings.

Gender equality observations in other and similar circumstances

The Swedish Research Council's gender equality observations have been disseminated both within and outside Sweden. The Swedish Research Council has been invited to conferences, both national and international, where the authors have been asked to talk about the results. We have also been asked to meet several research councils and representatives of higher education institutions to talk about the methods we use. We have established that there are today more funding bodies that use, or alternatively recommend, observation studies. Not all publish reports in the way that the Swedish Research Council does, however.

In 2015, the Swedish Agency for Economic and Regional Growth published a report with similarities to the Swedish Research Council's gender equality observations. The object of the study is company financing at public funding bodies, and the method used includes observations of the funding bodies' assessment and decision-making meetings. Just like the Swedish Research Council's studies, the results show that unconscious perceptions of the abilities of men and women can impact on the assessment processes. For example, the assessors have more or less unconscious perceptions that women who run companies are cautious, do not dare to make large investments, only need small amounts of funding, and are active in the "wrong" industries, which cannot be funded and lack growth potential. Men are assumed to dare to invest, need much funding and are active in the "right" industries, which can be funded and have growth potential. In actual fact, there are no differences in size, growth, performance level, financing risk or payment ability.²⁵

In 2017, Riksbankens Jubileumsfond engaged two researchers to conduct gender equality observations. A representative from the Swedish Research Council's

²⁵ "Under ytan Hur går snacket och vem får pengarna?" Tillväxtverket 2015, pp 1-3.

gender equality observations was invited both to a preparatory meeting and to a seminar, where the reports from the Swedish Research Council and from Riksbankens Jubileumsfond were presented. Several of the observations noted in the report from review panel meetings at Riksbankens Jubileumsfond are similar to those previously noted at the Swedish Research Council, which is also explicitly stated in the report from Riksbankens Jubileumsfond. Several of the recommendations are also similar to those made in the Swedish Research Council's reports. For example, the authors of Riksbankens Jubileumsfond's report recommend that it should establish rules for seating plans, and clear rules for how the chair should lead the meeting. The authors also consider that the concept of scientific quality and criteria for what constitutes research of good quality should be problematised, and ask the question whether there are underlying perceptions that affect the assessments, for example underlying gender norms. Other interesting aspects highlighted are the need to clarify different underlying gender patterns in application behaviour, and implicit bias in the assessment of quality.²⁶

At the beginning of the 2020s, one of the scientific committees at the Swedish Research Council initiated a study on gender equality, including gender equality observations, which also was carried out by researchers from Örebro University. The researchers' report is divided up into three sections: a research review, a quantitative and qualitative report on statistics relating to applications and written assessments of these from the last eight years, and a report describing the gender equality observations carried out by the researchers in 2022, focusing on educational sciences. One conclusion of the observations is that it is difficult to separate the aspect to be prioritised, namely scientific quality, from the researcher's competence and merits, as "scientific quality" according to the researchers correlates to a "merit focus" and, by extension, career age. "It is therefore not possible to exclude that the way scientific quality is regarded can function as a mechanism for injury," the researchers write.²⁷ This is a conclusion about the strong impact of merit assessment on the assessment of researchers' applications for research grants in some research fields, which has also been recognised in the report published by the Swedish Research Council in 2020, for example.28

In a project funded by the European Commission's seventh framework programme, a team of researchers have investigated recruitment processes within academia from a gender perspective, and one of their proposals is that higher education institutions should conduct gender equality observations. The report from 2015 is formulated as a handbook. Among the recommendation provided by the authors are several that are applicable also for research councils, for example the importance of basing assessments on specific criteria, and that

²⁶ Liisa Husu och Anne-Charlott Callerstig: Riksbankens jubileumsfonds beredningsprocesser ur ett jämställdhetsperspektiv RJ 2018.

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²⁷ Könsbias i forskningsfinansieringens bedömningsprocesser En studie av Vetenskapsrådets bedömning av ansökningar inom utbildningsvetenskap. Vetenskapsrådet 2023. To injure means to treat unfairly, or to discriminate.

²⁸ A gender-neutral process? Swedish Research Council 2019.

these criteria are used in an equivalent way for all applicants. One recommendation is to create an open discussion environment, where the competences of all meeting participants contribute to a good process. Another recommendation is to include both women and men in review panels.

The report differentiates between two types of bias: bias related to the process, and bias related to the criteria. The latter refers to the higher education institution using measures that can create obstacles to women, such as using the measure international mobility. The report recommends the use of gender equality observers in the review processes, and proposes education in gender equality for all persons taking part in recruitment processes.²⁹

It emerges from an interview with one of the researchers behind the report, Minna Salminen-Karlsson, that a review conducted by her of seventeen positions advertised found various examples of how women had been disadvantaged in the processes. Examples of these are that irrelevant personal information was passed on, without any equivalent in statements about men who had applied for the same position. Statements about women's qualifications also had pure computation errors, scientific publications were called "reports", and the statements included lists of the qualifications that the women were lacking, which was not the case for statements relating to men.³⁰

²⁹ Gender Issues in Recruitment, appointment and promotion processes – Recommendations for a gender sensitive application of excellence criteria. Expert report ER-Festa-2015-002

³⁰ Kajsa Skarsgård "Undvik genusfällor för att få mer likvärdig rekrytering" in Universitetsläraren 2016 No 6, p 19.

General information about the implementation of assessment of applications

Brief description of the assessment process

In short, the review process starts with a researcher submitting an application for a research grant to the Swedish Research Council. To assess the quality of the applications, the Swedish Research Council engages researchers who are prominent within their respective fields. In the first instance, the Swedish Research Council's scientific councils, councils and committees decide which researchers are to review the applications.³¹

The researchers assessing the applications are divided up into groups known as 'review panels'. The report uses the concept of review panels, or just 'panels', and the researchers who are assessing the applications are called 'members'.

The members begin their work by participating in preparatory meetings arranged by the Swedish Research Council. Thereafter, the members start the review of applications. The members grade the applications according to the Swedish Research Council's instructions, which are gathered together in subject-specific review handbooks. The applications graded as being of relatively lower quality are then sifted out during a 'sifting meeting'.

The procedure for the sifting meetings varies between the different research fields. For some, the sifting meeting is organised in a way similar to the review panel meeting, for others the sifting meeting is much shorter in terms of time taken, less formalised, and may also have fewer participants.

The purpose of the sifting is to give sufficient time to discuss the applications that are of the highest quality and have a realistic chance of being funded. The sifting procedure is important for gender distribution, and the goal is to achieve a gender-equal outcome. The panel must make sure that it does not sift the application in such a way that only a few applications from either gender remain. If this happens, it may be difficult for the review panel to produce a proposal that entails the proportions of women applicants and men applicants correspond to the proportions that will be recommended for a research grant. Even if this is a guideline that shall primarily be applied for each research field in total, each review panel has to focus on the issue in order for those making the funding decisions to have a balanced list to begin with. We note that most panels are

³¹ See for example Bruno Latour, Steve Woolgar & Jonas Salk 2nd ed Laboratory Life: The Construction of Scientific Facts, Princeton 1986, and Sharon Traweek Beamtimes and Lifetimes: The World of High Energy Physics, Harvard 1992.

aware of this, and that the Swedish Research Council personnel often play an important role in ensuring the gender distribution issue is not forgotten.

The applications that remain after the sifting process are dealt with at a review panel meeting where the entire panel shall agree on a numeric grade for each application, and discuss the feedback that the applicant will receive in a statement. At the end of the meeting, the panel makes a ranking of the applications it wishes to recommend for funding to the Swedish Research Council.

The meeting is led by a chair and vice chair, who are both researchers. Other researchers serve as members and reviewers of applications, and the vice chair also assesses applications, while it is less common for the chair to take part in the assessment. From the Swedish Research Council, one research officer who has administrative responsibility, and one senior research officer who has a doctoral degree within the research field take part. A representative of the scientific council/committee also takes part in meetings as an observer. This person functions as a link with the scientific council/committee, and has the task of answering questions and if necessary passing on knowledge of how the review panel meeting is functioning to the scientific council/committee, but their focus is not on gender equality.

For most panels, the review panel meeting begins with a generic presentation that the Swedish Research Council personnel is usually responsible for. The presentation may be shortened at the review panel meeting if it has already been shown during a preliminary conference or a preparatory meeting. Part of the presentation deals with issues of gender equality and equal treatment. The presentation instructs the members of the importance of dealing with the applications without letting it be affected by bias relating to aspects such as the applicant's gender, age, or ethnic background, but also³² bias relating to the higher education institution the applicant works at, or a particular research tradition, to mention just a few aspects.

The presentation at the start of the review panel meeting is, in principle, the same for all research fields, but may differ in detail. For one research field, the review panel meetings start with the same presentation as the others, but it was done by the panel chair, not by the senior research officer, which is the practice for other panels.

After the presentation, the chair usually takes over and has the opportunity to add further information, and the members are also able to ask questions. After this, the joint review of application begins.

³² Swedish legislation has seven grounds for discrimination. These are: gender, gender identity or expression, ethnic background, religion or other faith, functional disability, sexual orientation, and age. Source: Equality Ombudsman.

Assessment criteria

Each application for a research grant is assessed according to four basic criteria: novelty and originality; scientific quality; merits of the applicant; and feasibility. A seven-digit grading scale is used, except for the feasibility criterion, where the grading scale has three digits. The assessment of the subsidiary criteria forms the basis for a summarising grade for each application, and this too uses a seven-grade scale. These criteria and grading scales are used by all scientific councils and committees. Instructions about the weight each criterion and grade should be given in relation to each other for the summarising grade differs between scientific fields. A common feature is that the majority emphasise that the summarising grade is not an average value or a simple summation of the subsidiary grades, but an overall assessment. For some calls, specific additional criteria are also assessed, such as relevance. The additional criteria are normally not weighted into the summarising grade.

The instructions to reviewers within humanities and social sciences and educational sciences respectively emphasise that the relative weight of the criteria can differ between applications.³³ The instructions to reviewers within medicine and health state that in normal cases, the focus when assessing applications for project grants and grants for junior researchers shall be on assessing the project's scientific quality.³⁴ The educational sciences committee also instructs members that they shall normally place the emphasis on scientific quality.³⁵ In the field of natural and engineering sciences, guidance is given that scientific quality and the merits of the applicant are the two most important criteria, while novelty and originality shall be given less weight.³⁶

According to the Swedish Research Council's instructions, the review panel shall take into account the gender equality goal and calculate the success rates in its proposal for the applications to be funded. If there are applications that the review panel have assessed as of equal value in terms of quality, then, during the ranking of the applications, the panel shall prioritise in such a way that the success rate for women and men is as gender-equal as possible. The success rate is a correlation of the outcome of the assessment in relation to the number of applications received.

³³ Peer review handbook Humanities and social sciences, Swedish Research Council 2023, p 13, and Peer review handbook Artistic research, Swedish Research Council 2023, p 13, respectively.

³⁴ Peer review handbook Medicine and health, Swedish Research Council 2023, p 19.

³⁵ Peer review handbook Educational sciences, Swedish Research Council 2023, p 13.

³⁶ Peer review handbook Peer review handbook Natural and engineering sciences, Swedish Research Council 2023, p 17.

Observations

Digital meetings predominate.

Digital meetings, hybrid meetings, and meetings where all members meet in person were used by the Swedish Research Council when handling applications in 2023, but digital meetings predominated. Each scientific council/committee decides whether the meeting shall be in person or digital, or possibly a combination, known as a 'hybrid meeting'. In the latter case, the panel chair and possibly vice chair and the observer from the scientific council/committee sit with the Swedish Research Council personnel at the Council's offices, while the panel members take part digitally. Digital review panel meetings take place for two or three days, while in-person meetings usually take place over two days.

The structure for some digital sifting meetings was sometimes a bit unclear, according to the observations. There were also technical problems, delays, and shortcomings in the documentation.

Technical problems noted during the digital meeting were problems with internet connection – sometimes this failed several times during a meeting. It also happened that participants forgot to place themselves in front of the camera, so that they were not properly visible. Other problems related to poor sound quality.

In one meeting, a member had a temperature and was tired. This led to the chair allowing members "as necessary" to shut down their cameras during the meeting. Needing to turn off the camera for a period is absolutely understandable, given the duration of the meetings, and several panels also allowed this.

Professional leadership and friendly atmosphere

The chairing was in most cases professional, friendly, and well-prepared. One observer describes this as the chair being inclusive and listening; pauses and periods of quiet for reflection were permitted throughout the discussions, and the chair took pains to ensure everybody could have their say. The chair did not need to hurry up the discussion or encourage any member to shorten their presentation of an application. The panel completed the assessment before the due time for completion.

In another panel, there was a palpable silence when, for example, the chair asked a question. Few took the initiative in discussions, and few argued for the grades that they had proposed, despite not everybody agreeing. The discussions in yet another panel were often lengthy, but the chair was rarely active in stopping the discussion, which meant that they ran short of time towards the end of the meeting. At another meeting, the panel did not follow the set agenda, and instead a form of feedback discussion arose already at the start of the meeting, and

continued for quite a while. Many comments were made about research quality in Sweden, and some problem-oriented comments on the review process were expressed.

Lack of time

Several panels became short of time. Several panels had many applications to consider, for others it may have been caused by insufficient planning of how to use the time.

For one panel, it was noted that the chair raised the tempo significantly during the final hours, the comment "can we make a decision now" was heard sooner, which meant that not all applications were discussed in equal detail. This was at a sifting meeting; by the decision meeting the same chair had prepared so that there was a good tempo without lack of time towards the end.

But other panels also had difficulty dealing with all the applications in the time provided, despite careful planning. For one panel, the chair shortened the breaks, or skipped them entirely. One reason was that it had been difficult to sift applications due to a large spread in the grading; it was relatively common for an application to have low, medium, and high grades for the different grading criteria. The chair still managed to be careful to ask the members if they interpreted the members' assessments and gradings correctly. This reduced the risk of the assessment losing aspects due to lack of time that should be weighed in according to the Swedish Research Council's guidelines.

Another panel discussed each application for a relatively long time, possibly due to the fact that five members reviewed each application. It was difficult to deal with all applications during the time provided.

One meeting lacked a time plan for how many applications should be dealt with during a morning session, for example. It was therefore a bit unclear what tempo the panel needed to have. The discussions took a long time during the first day, which meant that the panel did not get very far into the list of applications. Ahead of day two, a time plan was drawn up and the panel discussed other strategies that could make the meeting more efficient.

The varying positions of the senior research officers during meetings

In the panels observed, the senior research officers adopted slightly different positions. They varied from a central role, where the senior research officer constituted an important support for the entire panel, to a less prominent role.

In the two panels where the senior research officers had a less prominent role, the gender equality observer noted that the observer from the scientific council instead was the one informing about guidelines and leading the meeting together with the chair. In both cases, these panels were part of the same research field.

In panels included in other research fields, the observer from the scientific council only commented on direct questions, while the senior research officer

was the one informing about the Swedish Research Council's guidelines and so on.

The panel interaction often works well

A general impression was that the atmosphere during the meetings was pleasant and professional, where all those involved were anxious to make a positive contribution.

The members often confirmed each other in positive terms ("as X previously mentioned..."). The reviewers often phrased their views from their own perspective ("as I see it"/"as I perceive it").

It was also noted that the members in general were keen to compromise even when they proposed grades that were divergent.

It did happen that some members, who contributed strong views or had special expert knowledge in a particular field, were recognised more often than others, and then also seemed to acquire a higher status and greater influence over the discussions at the meeting. This could apply to both women and men.

The process of "raising a hand" was used sporadically by one panel. During the concluding discussion, which was about gender aspects and the review panel's slightly non-gender-equal outcome of the assessment, one of the members pointed out to the others that two members had asked to speak (raised a digital hand), which the members taking part in the discussion had not noticed, despite the hands having been raised for several minutes. In this particular case, the hand-raisers were women, while men asked to speak more spontaneously.

In one panel, the comment was made that a female member appeared to be very well prepared, and that she had done a very good job so far. She had not previously been a panel member, and she was relatively junior. The fact that this particular member was an asset to the panel was repeated by the chair and the observer during the pauses, not just once but several times. No other member was discussed or evaluated in this way. A possible interpretation may be that the younger women did not correspond to the standard image of what a competent researcher should look like, and this triggered the reaction described.

... but sometimes the interaction is less good

If the interaction is less good, there is the opportunity for the chair, vice chair, observer and the Swedish Research Council personnel to use pre-set pause meetings to discuss how this can be dealt with. The pre-set pause meetings function as checkpoints for the panel in question, and this is an item that has been added relatively recently. The gender equality observers believe that these pause meetings raise the general quality of the processes.

Issues that can be discussed during pause meetings may, for example, relate to a meeting participant who is becoming too dominant and silences other members, or members who are unwilling to let the assessments by other members affect

the outcome for an application. In other of the panels observed, such a problem was solved by the chair receiving support in the form of good advice about how to stop problematic behaviour, and the rest of the meeting had a more even distribution of speaking time. There may also be practical problems that need solving, for example that the time plan is not working, or that issues of principle need to be discussed and solved.

The role of chair became difficult for a group where strong disagreements arose between different factions. In this case, the chair was criticised already during the sifting meeting, when the chair made several attempts to lead the meeting and direct the discussions. At the review panel meeting, the chair appeared to be slightly unwilling to bring up the issue again, the observer noted. Both during the review panel meeting (with the entire panel) and in pause meetings (when the Swedish Research Council personnel, chair, vice chair, and the scientific council/committee observer took part), the problem was highlighted by several: members, the Swedish Research Council personnel, and the scientific council/committee observer stated wishes that the chair should do more to direct the discussion, which was currently dominated by a couple of members. However, the problem remained throughout the review panel meeting.

Designation of the applicant

The observers' general impression was that the review panels' members often strove to use gender-neutral designations when dealing with applications for project grants. Common designations were, for example, registration numbers, last names, "the applicant", "the researcher", and "the research leader".

In some review panels, "she" was frequently used, but not "he" about the applicant when dealing with applications for project grants. In one group, this was commented on with some surprise by a chair, who expressed to the senior research officer that "there was an awful lot of 'she' here". This can possibly be interpreted as men still being the norm in the research system, and that women who apply for grants and are intended as research leaders constitute a divergence that the panel members, consciously or unconsciously, feel needs to be recognised.

It sometimes appeared that the Swedish panel members were more prone to use she or he compared to those recruited internationally. This might possibly be due to the Swedish panel members having knowledge about the applicants, which the international members lacked. In addition, those members who do not know which Swedish names designate men and women may have had difficulties with decoding the names, and this might also have contributed to differences between international and Swedish members.

In discussions about grants aimed at junior researchers³⁷, the observers found that it was more common that the applicants were designated as she and he respectively.

³⁷ Designated as starting grant and consolidation grant.

The gender of the applicant is hidden

To some extent, the Swedish Research Council personnel directs how the panel members designate the applicants, as the column showing the gender of the applicant is hidden during the discussion of the applications in the 'meeting documentation', a joint and summarising document used throughout the meeting. An interesting question raised by this procedure is whether the Swedish Research Council can more easily achieve the goal of increased gender equality in the assessment by doing this. Or may it mean that the group has greater difficulty taking into account an under-represented gender?

In one review panel, the scientific council/committee observer criticised the fact that the meeting documentation did not show the gender of the applicant. The background was that the review panel was surprised to find out towards the end of the meeting that the outcome did not correspond to the number of applications received, which is a method that the Swedish Research Council uses to determine what is a non-gender-equal result. The observer considered that it is difficult to adjust the outcome when the meeting is nearing conclusion, in particular when nobody had commented that it might be difficult to achieve the goal of gender-equal assessment. They also underlined that is not the scientific council/committee that invented the process where the applicant's gender is hidden.

The issue may be compared to previous gender equality observations and the recommendations aimed at the Swedish Research Council. The 2020 report suggested that the panel chair and Swedish Research Council personnel should be encouraged to increase vigilance throughout review panel meetings of aspects relating to the goal of gender-equal success rates. The fact that the Swedish Research Council personnel only reveal the gender column in the meeting documentation at the end of the meeting does not necessarily mean that the chair and personnel cannot continuously monitor how the assessment is working in relation to the gender balance, but according to the observation material it does happen that it comes as a negative surprise to the panel members, which is unfortunate.

Assessment and grading

The observation material does not generally show differences between how panel members describe applications from women and men respectively. Common descriptions of the scientific quality of the applications are "well written", "excellent", "strong", "unique", "weak", "unfocused", and "at the leading edge", which were used for applications from both men and women to a varying degree. Some panels used "excellent" more often for applications from men, while "potential", which was used for applications from junior researchers, was used slightly more often to describe women's applications. One observer noted that a female applicant was described as "hungry". It should be added that

³⁸ A gender-equal process Swedish Research Council 2020.

there were some differences between research fields in terms of choice of words; here, both language and culture probably played a role.

In one review panel, it was noted that one application was assessed as being "too ambitious" when the project's feasibility was discussed. The assessment that the project was too ambitious related more often to women's applications than for men's; a tendency that was noted also in previous observation reports.

It was common for members of the review panels to use emotional arguments, such as "exciting", "beautiful", "fine", "fascinating", or "seductive" about applications they had reviewed. An application could also give rise to disappointment or dislike. Irrespective of which, the statements were defined and nuanced in the reporting that followed.

In two of the review panels studied, several members stated that the subject of an application was outside the framework of their expertise. One vice chair in another group also mentioned that they were a bit "out of form", as they nowadays usually worked mostly in another role. These examples are few, and it is of course difficult to draw any conclusions, but according to the notes, in all four cases it was a woman who told of her limitations, which raises the question whether women are more prone to bring up this issue.

The fact that a panel member openly states which expert knowledge they lack may increase the quality of the assessment, as this creates understanding of preconditions for the individual assessment. It may favour the quality of the assessment, but can of course also entail negative consequences. Hypothetically, the status of the members in question may diminish, and therefore possibly their influence on the handling of the applications that fall within the framework for their expertise.

Preliminary grades and average grades

The observations indicate that the review panels to a large extent tended to use the grades set by the reviewers ahead of the joint panel discussion as the starting point, which underlines the importance of having early information about the Swedish Research Council's gender equality goal.

This is because several of the observations indicate that the final grades are often set in as an average value of the individual grades, those set by the reviewers before the meeting. This is problematic in several ways. In part, because the reviewers use the grading scale in different ways, which is emphasised in the meeting introductions the panels receive, in part because the function of the meeting is precisely to create an assessment based on the discussions at the meeting, which is more than a joining up of the individual parts, or an average value. In some panels, the problem with the use of average values was highlighted; it might be the chair, the vice chair, the Swedish Research Council personnel, or a panel member who raised the issue. An obstacle to any changes in the panel's way of working was that on several occasions, the realisation of the problem with average values arose fairly late.

One example of how average grades (based on the grades given by the reviewers before the meeting) came to be focused on in the handling of applications was the panel in which one member had calculated the average values for all applications ahead of the meeting. Before each application was dealt with, they — with the chair's approval — informed the panel members of the average grade each application had received. This continued throughout the first day, but stopped at some stage during the second day, when another member pointed out that the average values presented were not relevant, as they were based on the grades given by the reviewers ahead of the meeting, and which were changed after the panel's discussions.

Another example from another panel related to an application where two members had ranked one application the highest and given it high grades, in contrast to another member who had given it lower grades. It ended with the application being given the higher grades, but the discussion went on for a long time, and calculations of the average value of the panel's grading were focused on. The grades were not a result of the discussion at the meeting; instead, the grades proposed in advance came to have greater weight.

At the same meeting, the senior research officer pointed out that the panel cannot change the principles for grading on the second day, and underlined the importance of having the same policy throughout the meeting. On the second day, the chair pushed a bit extra to achieve a discussion about the grades, to try to achieve a joint assessment instead of an average value. The discussions became a bit more focused, and the members absorbed each other's arguments better.

Assessment of applications and applicants

Assessment of competence and merits: great variation between panels within different research fields

The text below described how the assessment of researcher merits was discussed during the meetings observed within the three research fields separately: medicine and health, humanities and social sciences, and natural and engineering sciences. The reason for separating the research fields from each other is that they differ in particular in relation to how merits are assessed. The observation material is greater for medicine and health, which is reflected in there being more material and more examples from this field.

In general, it can be said that researchers' previously accumulated merits were often given greater importance for the assessment in medicine and health in particular, despite this not being in accordance with the instruction to the panel members from the Swedish Research Council.

Humanities and social sciences gave relatively less weight to the researcher's competence and merits; the question asked was often whether the researcher had

the right merits for carrying out the research project, rather than whether the researcher had the highest or largest number of merits.

Natural and engineering sciences instructed their panel members to emphasise the researcher's competence and merits, but these panels discussed the researchers' competence and merits to a minor extent.

Several research fields brought up the issue of what actually is included in an assessment of the researcher's competence and merits. On several occasions, this was an issue that was discussed a bit too late; that is, after many applications had already been dealt with.

Medicine and health

In the field of medicine and health, there is a tradition of placing greater emphasis on the applicant's competence and merits when the applications are assessed and graded.³⁹ Reports from previous gender equality observations have underlined that this may be a reason why medicine and health for a number of years have found it more difficult than other scientific fields to reach the Swedish Research Council's gender equality goal. This is because the lack of gender equality that characterises the senior group of higher education personnel in particular risks being transported into the Swedish Research Council when the emphasis is placed on researcher merits to such a great degree. These risks favouring more senior men as a group.

According to the instruction from the Swedish Research Council, "For Project grants, Consolidator grants and Starting grants, 'scientific quality' should be given more weight in the overall grade". This means that when the subsidiary grades are weighed together into an overall grade, the grade for scientific quality shall be given greater weight for the grant forms in question.⁴⁰

In one of the panels, during the first pause meeting, the senior research officer and the chair discussed the problem of the panel members focusing to a high degree on the applicant's merits. They agreed that the chair should raise the issue of the assessment with the panel. Afterwards, there was greater focus on the project's scientific quality in the discussions.

On several occasions, one particular panel member reacted in a slightly irritated way to the grade for competence and merits for some women applicants being set low by the panel, in the view of the panel member, given what the women applicants had performed. The panel did not protest against the panel member's interpretations and the grades were adjusted.

When the sifting meeting was about to end for one of the panels, a discussion was held on the outcome: The group of applications that had received the highest overall grades was dominated by male applicants. The chair was still content; the result is better than in previous years, they said, and referenced the fact that they

³⁹ See previous reports from gender equality observations.

⁴⁰ Peer review handbook Medicine and health 2023, p 19.

would look carefully at the female applicants' merits and in this way assure themselves that this subsidiary grade had been correctly assessed. The scientific council observer commented on this as follows: "we know that it depends on career age", which can reasonably be interpreted as the panel using the researcher's competence and merits as the most important assessment criterion. The comment also indicates that the research's merits was not assessed in relation to career age, and therefore would favour senior researchers as a group more than junior researchers, and men as a group more than women. This method was not in accordance with the Swedish Research Council's instruction, which states that scientific quality shall be given greater weight in the overall grading.41

In one panel, the members all gave high grades to an application that nobody really understood. They trusted the researcher, who was highly merited. "Carelessly written" applications, or applications where "the applicant is better than the application" was a recurring theme. Applications designated in this way come from male applicants who receive low grades for scientific quality for the project, but high grades for competence and merits; a grade that is consequently given great weight in the overall assessment. No discussion was held about whether this could mean that men as a group are favoured.

One panel expressed frustration that the applicants recommended for a grant were persons who had already received grants: "How do you get into the system when we only give to those who have already received", the panel members wondered. Another panel noted that the two applications that topped the ranking list had a highly merited researcher who is "60 plus". In another panel, the members explained the uneven allocation of funding with career age: men have conducted research for longer and have stronger merits, that is why they receive more funding, it is not about gender. The examples show how the review panel indirectly gives advantages to senior researcher when the grade for competence and merits is given great weight. It is interesting that panels did not always appear to be aware that this may result in different consequences for women and men respectively.

One panel discussed the issue of whether the applicant's gender may affect the assessment. The panel members considered that they only assessed scientific quality and otherwise were neutral to gender. "After all, we don't know who is who, or what gender they are, we are not affected by that." The panel also asked for information about how men assess men and women assess women, and to what extent the members were also governed by their prejudices. "When is it that we make a difference?"

It appears reasonable for the Swedish Research Council to assist the panel members with information, so that they understand the connection between the working methods that they indirectly and directly use, and that these uses can favour or disfavour certain groups. As previously pointed out: if the group of senior professors to a larger extent are men, the group of men may be favoured if

⁴¹ Peer review handbook Medicine and health 2023, p 18.

the assessment of applications for research grants is based on how much research and publication the applicant has previously undertaken. For this reason, among others, the instruction for medicine and health has been adjusted so that the assessment of an application shall in the first instance be focused on the project's scientific quality, but in reality, the panel members continue to assess applications based on the previous merits the applicant has been able to acquire.

Publication is a common - in actual fact the most common parameter - that members of panels that assessed applications in medicine and health used to measure the competence and merits of the applicants. Sometimes, supervision of doctoral students was also mentioned as being meriting, or that the applicant had previous experience of project-leading research, and in such cases, it was also often mentioned whether the publications generated within the previous research project was assessed as being of good quality.

The quality of the research articles was often measured via the journal used for publication: the applicant should preferably have published their articles in "good journals". Here, highly-cited journals are often intended, but they may also possibly be the journals perceived as being the most central for a scientific field.

One example was when the chair of one of the review panels mentioned that it was difficult not to use the journal's impact factor when the panel was to assess the applicant's merits. Impact factor usually refers to the journal's overall citations; this is what determines whether a journal is highly cited or not. Using impact factor to evaluate the quality of individual articles is debatable, but many researchers consider it to be a well-functioning proxy.⁴² Applicants who were considered to have low competence and weak merits were those who had not published a lot in recent years.

A different, but slightly odd example of the role that published articles could have in discussions about applications was that a chair read aloud from the publication lists of all the applications distributed at the panel meeting, and questioned the grades the reviewers had chosen to give for the researchers' competence and merits. A chair is not tasked with grading applications; this method is not recommended by the Swedish Research Council.

⁴² Swedish Wikipedia's definition of "proxy" means, in a scientific context, that you want to measure or estimate something that cannot be measured directly, and instead you measure something different that has a known relationship to what you actually wanted to investigate. All proxies are burdened by a slightly greater uncertainty than direct measurement of the thing you wanted to measure. The measuring method used, and a statement of the estimated uncertainly of the relationship between the proxy and the information sought should therefore always be stated. Proxy - Swedish Wikipedia downloaded 1 March 2024.

Humanities and social sciences, and educational sciences

During the discussions in the review panels in humanities and social sciences, and in educational sciences, the focus was often on the scientific quality of the proposed project, as well as the project's novelty value. Evaluation of merits took up less room. This could vary between panels, however; there were members who shared the perception that good merits for the applicant are important and can compensate for failings in terms of the application's scientific quality.

In one panel in humanities and social sciences, the members measured the quality of the journals that the applicants had published in as a proxy for measuring the quality of the research the applicants had carried out previously; a measure that was intended to reflect the applicants' competence and merits. How much project funding the applicant had received, and how the applicant had published in relation to the amount of project funding could also be analysed to measure competence and merits. Other panels did not apply these methods at all.

In several cases, the review panels in humanities and social sciences recommended the Swedish Research Council to award grants to applications from persons with relatively recently awarded doctoral degrees. In these cases, the junior researchers were considered to have the right merits to be able to implement the project the application related to. The panels therefore appeared to assess the applicants' merits in relation to their career ages, and in relation to the type of study the applicant was to implement. The right merits, rather than many and "heavy-weight" ones, appeared to be the guiding principle for these panels.

But this could differ between review panels. In one panel, where several members were sceptical of the scientific quality – several thought the project was more of an investigation – others considered that the merits were a guarantor of the project's scientific quality:

"If it's about originality, then you just have to look at their previous publications. It is obvious that the project will result in good research publications.".

In panels that assessed applications from humanities and social sciences researchers, it could be perceived as problematic when a senior researcher had applied for funding for a research project to be implemented by a doctoral student. How competence should be assessed in such cases was discussed in detail in one of the panels observed, who all agreed that it is not possible to assess the competence of entirely untested persons. In other cases, there was no information about the person who was to carry out the research project, as a doctoral student position would be advertised in the event the research grant was awarded. The grade for merits in these cases was set low, but the grade for implementation was also impacted negatively.

One panel repeatedly discussed low career age as a problem when dealing with the applications. The observer from one of the committees instructed that the panel should not discriminate against junior researchers on the basis of age. The panel members discussed this, and agreed that low career age should not be an obstacle to recommending that an application was awarded a grant.

Natural and engineering sciences

The review panels in natural and engineering sciences discussed the scientific merits of applications to a great extent, while, according to the observation material, the merits of the applicants were rarely perceived as a central factor in the assessment. According to the instructions, both of these (scientific quality and the applicant's merits) are the most important criteria for the overall assessment, while novelty and originality are of less weight.

In one of the panels, a discussion about the assessment of merits arose, which the panel perceived as facing a general transition in research assessment internationally. Members stated that there are so many different ways in which a researcher can gain merit, and that other researcher councils, for example in England, had moved away from assessing merit in the way that panel members shall do according to the Swedish Research Council's instructions. Internationally, assessment is more about the quality of the proposed research and the overall competence of the research team, the members considered, and criticised the fact that according to the Swedish Research Council's instructions, they were to focus on the applicant's merits.

Applicants' merits were usually described briefly during the review panel meeting, as good/excellent/very competent. The gender equality observers did not perceive any differences in the assessment of women's and men's applications.

The applicant's gender was hidden in the meeting documentation, and no discussion about gender or gender equality was carried out in the discussions on the first day. On the other hand, the subject was raised during a discussion after the first day of the meeting. The chair, vice chair, observers, and personnel from the Swedish Research Council took part. It was established at the meeting that women were over-represented among the project grants that appeared likely to be proposed for a research grant award, calculated as number of applications received in relation to the expected outcome. The chair raised the issue of the option of prioritising one specific application before another. The senior research officer and the scientific council's observer responded that the panel can make

such a prioritisation if the applications are of equal quality. The chair appeared to be slightly uncomfortable that this could mean that the panel would prioritise a male applicant ahead of a female.⁴³

In another review panel, the opposite applied – men were over-represented, a problem that was commented on by the chair as not being a worse result than at other research funding bodies.

Different forms of bias

The assessment of research projects shall be based on objectivity, but researchers can also have a bias.

This report focuses on possible bias in relation to an under-represented group, and other bias that possibly interact with gender. For example, panel members may have a perception of which research questions belong to a subject, and which do not, or have a bias against a scientific method. The issue for this report is whether this interplays with gender in particular, but other grounds for discrimination are also commented on where the observer has noted that these exist.

A phenomenon that was noted in one panel was that several applications were not considered as "a good fit". This applied to applications from women to a greater degree than from men. The women applicants used other methods than the traditional ones, which meant that discussions about these applications also differed: there was a greater focus on societal relevance, and words such as "interesting" and "important" were used in discussions about these applications, more than for other applications. Another application dealt with in the same panel was not considered "a good fit" either, this time because it was too general. Reaching an agreement was difficult, however. One member was critical, another expressed liking.

The same panel joked about an applicant who is an emeritus, and critical assumptions were made about how up-to-date an older applicant could be about their research field. Age is not an obstacle for applying for a grant from the Swedish Research Council, as the chair quite correctly pointed out. Whether this bias in relation to the researcher's age was important or not is difficult to assess.

In one of the review panels observed, problems arose when one faction of members who themselves work with the X method became too dominant. According to the observation, this faction was sufficiently large to be able to dominate the assessment of all applications, both those based on the X method

⁴³ During 2024, the Swedish Research Council has developed the guidelines so that when there are large differences between the number of applications from either gender to the review panel, which means that individual applications may affect the success rate greatly, an exception may be made from the goal of achieving the same success rate, on condition that the gender with fewer applicants to the review panel is not disadvantaged. This can be done for the purpose of promoting gender equality in the field as a whole. Riktlinjer för jämställdhet i processen finansiera forskning, Vetenskapsrådet 2024.

and those based on the Y method. The choice of method interplayed with gender inasmuch as the most dominant member representing the X method was a man, and the most dominant member for the Y method was a woman, but both received support from other members, both women and men. In this panel, the assessment did not turn out unbiased. For example, when applications were identified as having certain weaknesses relating to the scientific quality, the applicant's merits could – in the event the application related to X studies – be given a relatively greater weight when the panel agreed on the overall grade. The corresponding was not accepted by Y studies, which meant that the assessment was not congruent. Here it should be remembered that the panel members were instructed to be alert to their own bias in relation to, among other things, a research tradition. A question that is raised is whether one-sided pleading for applications that use a certain method can be considered in breach of the Swedish Research Council's instructions.

The number of applications to this panel was entirely even between women and men (50/50), but the success rate was lower for women than for men. After the sifting meeting, there was a surplus of applications from women: 19 applications (61 per cent) against 12 from men (39 per cent), but the final result favoured men; the panel recommended that a total of 11 grants should be awarded, of which 7 (64 per cent) had a male main applicant, while 4 applications (36 per cent) had a woman as the main applicant. The panel chose to try to balance the outcome by ensuring all four applications sent to a 're-allocation panel' were from female applicants.⁴⁴

In one panel, a female applicant's competence and opportunities to implement a project was problematised with arguments that, on closer inspection of the applicant's merits, turned out to be unfounded. An extra review of the merits was carried out spontaneously by one member at a time when the discussion of this application and the researcher's lack of merits for the project had been in progress for a relatively long while. When the member could communicate to the panel that the merits were good, the fact remained that the application could not be recommended for funding, given the grade the panel had decided on. It is possible that the discussion of merits in this particular care did not have any conclusive impact. However, it did seem to the observer that the panel may have been influenced by unspoken but negative perceptions of the female researcher's capacity.

Assessment of applications from junior researchers

Another aspect to be assessed in certain research fields is the independence of junior researchers. Often, the panel measures this aspect via the relationship to the supervisor and research leader; the issue of an independent line of research in relation to the previous supervisor or research team that the applicant belonged to is often determined via the publication list. In one panel, the observer from the scientific council and the chair of the review panel emphasised the importance of including the issue of independence when applications from junior researcher

⁴⁴ Means that certain applications have another chance in a separate review panel.

are dealt with, irrespective of whether it was a grant to junior researchers or a project grant.

The emphasis on the issue of independence was most pronounced in medicine and health. The issue was not discussed at all in panels dealing with applications in humanities and social sciences, including educational sciences. One panel in natural and engineering sciences did not discuss it either. The observer from the scientific council commented in an informal conversation after the meeting that it just happened that this was not brought up, and established that there were so many aspects of an application to discuss that some of them were not focused on.

One question that was also given weight was whether the applicant had been employed at another higher education institution than where they had been awarded their doctoral degree. The grade was often set lower if the researcher had not changed higher education institutions or research teams.

For applications from women, two of the panels problematised issues of independence in slightly more detail than for applications from men. One example of this was an application that was discussed for the longest time, and was written by a young female researcher. Her independence took up several minutes of the discussion. It was mainly regarded as problematic that she had co-produced so much with her supervisor.

Is it a merit to have grants from other funding bodies?

The 2020 report noted that there were differences in how a research grant from another funding body was assessed; it could be assessed as a merit, but on other occasions it was brought up as a potential problem according to the report. This year's observations showed the same inconsistency in one of the panels. When a male applicant had grants from different funding bodies, this was considered to indicate good research quality and independence. When a female applicant had a grant from another funding body, this was instead a disadvantage. The value of giving her further funding was questioned: "she is bathing in money, what would be the effect of this?". The question was asked by a panel member. Similar patterns have been identified in previously published reports from gender equality observations.

In other panels too, it emerged that the Swedish Research Council needs to clarify to the panel members how the assessment shall be done when researchers have grants from several funding bodies. One example is when a member mentioned that an applicant is simultaneously project leading another similar project. There was a worry that the same research team was applying for funding of similar projects but in differing clusters. The chair asked the senior research officer to make a statement. The senior research officer encouraged the reviewers to disregard this. An international panel member pointed out that clarification is needed on this issue, as it is handled differently in different countries, and by different funding bodies.

Informal (irrelevant) information

In several panels, individual members communicated informal or irrelevant information, that is, information that was not included in the application and that according to the Swedish Research Council's guidelines should therefore not be discussed at meetings. The problem often ceased once the member had been reminded of the Swedish Research Council's guidelines for how applications shall be reviewed and assessed, but not always. In some cases, the chair, the representative from the scientific council, and the Swedish Research Council personnel had to intervene repeatedly and remind members not to bring up and assess individual circumstances or other information that was not included in the application.

One example was when the members disagreed on whether the application included a CV. The rapporteur claimed that they lacked access to the CV, but knew about the applicant, and, with this knowledge, still felt able to set a grade together with the other panel members.

Another example was when a member wanted to contribute to the discussion of an application they had not read. They wanted to argue for a higher grade, as they knew about the department the researcher was linked to: "I haven't read the application, and this is not my field... but X is known and has a good reputation and such a high profile (et cetera)".

In one panel in particular that was observed (but not just in that one), information was repeatedly communicated that had been gathered from other sources than the application the panel was asked to discuss. During the meeting, one member searched a database that collects articles, and changed their mind about a female applicant's merits, as they thought she had published in too many different subjects and that she for that reason was not sufficiently qualified. The senior research officer told the panel member to base the assessment on the contents of the application. The panel member argued in favour of their behaviour, however, and continued, together with the chair, to talk about the applicant's publications in the database, which they read out aloud. The same member also said "I know her well" about another applicant, and stated that she would be a good project leader.

When another panel discussed an application, the applicant was criticised for shortcomings in relation to independence. Another member, who themselves had given high marks, then said that they know the applicant and know that the applicant is independent. Another panel member pointed out that the applicant had received low grades for "implementation" last year, despite the member themselves underlined that they were not really allowed to talk about this. In most cases, the chair or some other person intervened by pointing out that the information was not relevant.

Awareness of gender equality and gender issues

In general, there is a high level of awareness of the Swedish Research Council's guidelines for gender-equal assessment in the panels observed, and interest in gender equality and also other grounds for discrimination were often discussed in a positive light.

Gender equality is a concept that is often used to indicate women's subordinate position. But in the assessment work, with the method the Swedish Research Council primarily used (number of applications in relation to outcome), men as a group could sometimes have an outcome that does not correspond to the number of applications. In those situations where this occurred, it appeared on some occasions to be a minor worry that men as a group had a worse outcome than women. On another occasion, in a panel that dealt with applications from a research field that is strongly male-dominated, some uncertainty arose. Should the panel, in order for the outcome to correspond to the number of applications, investigate the possibility of recommending one more application from a man?⁴⁵

One group showed an expressly positive interest in the person of the gender equality observer. The observer from the scientific council brought up the fact that the members of the scientific council had talked about wanting to learn more about how they could work with gender equality issues in their observations during review panel meetings, as they are after all present.

Criticism against the Swedish Research Council also emerged from members who thought that the Council did not sufficiently direct the meetings, so that aspects that could affect gender equality were dealt with. For example, it was pointed out that other funding bodies take into account parental leave, absence due to illness, et cetera, but that the panel during its meeting had not touched upon these aspects in conjunction with the assessment of applications. A couple of panels did, however, mention parental leave explicitly in the discussion about assessment.

There were examples of members being prepared to take into account the situation of researchers with young children to a greater extent than the Swedish Research Council requires. For example, in relation to one applicant it was pointed out that she had borne four children and had a break of nearly three years for parental leave, but this had not impacted negatively on her gaining merit. In another panel, one member stated as follows about an application: "Excellent research project, we shall not discuss gender, but she has published a

⁴⁵ During 2024, the Swedish Research Council has developed the guidelines so that when there are large differences between the number of applications from either gender to the review panel, which means that individual applications may affect the success rate greatly, an exception may be made from the goal of achieving the same success rate, on condition that the gender with fewer applicants to the review panel is not disadvantaged. This can be done for the purpose of promoting gender equality in the field as a whole. Riktlinjer för jämställdhet i processen finansiera forskning. Riktlinjer för jämställdhet i processen finansiera forskning, Vetenskapsrådet 2024.

lot, despite having two children." In one panel, a discussion arose about what the conditions are for junior researchers, and someone mentioned that in other countries, funding of childcare may be included in the research grant.

Given that the question has been raised, the Swedish Research Council may consider emphasising more that panel members shall take into account deductible time.

Assessing gender perspectives

The fact that several panels had awareness of gender aspects, gender, and gender theory was noticeable particularly in humanities and social sciences, and educational sciences respectively. Comments from members were made repeatedly that a feminist perspective/gender theory, gender aspects, et cetera were missing "despite having been relevant for the project", alternatively that there was "good knowledge about the field" in the researcher team. This is information that affects the assessment of scientific quality.

In review panels for other research fields, it emerged that the sex and gender perspective was generally perceived as an important issue, but also that there was a lack of knowledge and procedures for the members who were to recognise this when assessing the application. In these panels, gender aspects on the research contents were rarely raised during the discussions. In one group, it emerged towards the end of the meeting that the members were unsure whether a gender perspective should be included at all in the assessment of scientific quality. When it became clear to the panel that sex and gender perspectives shall be included in the assessment of scientific quality, the view was put forward that this should be clarified, and preferably also that the gender perspective could be assessed as a separate criterion.

Grounds for discrimination other than gender

On some occasions, panel members drew attention to grounds for discrimination that they considered the review panels cannot, but should, take into account. One member thought that ethnicity and social background should be weighed into the assessment: "How many of those that the Swedish Research Council awards grants to grew up in Rosengård, we don't know that." (Translator's note: Rosengård is a socially deprived district in Malmö.) Ethnic background and problems associated with the Swedish Research Council asking applicants to state legal gender were other grounds for discrimination that panel members spontaneously raised in discussions.

Recommendations

The report here gives recommendations to the Swedish Research Council that point out further development opportunities for the internal work that has been carried out relating to gender equality for several years at the Swedish Research Council. This is handled primarily by the Swedish Research Council's scientific councils and committees and the Department of Research Funding.

The results from the observations cannot be generalised, and all the recommendations do not apply for all scientific fields. This is partly due to the Swedish Research Council's processes differing to some extent between the different scientific fields, and also between different grant forms.

Some of the recommendations have also been included in previous reporting of the Swedish Research Council's gender equality observations.

Make room for reflection on equivalent and objective assessment

Safeguard opportunities for review panel members to develop the tools they need to assume a reflective attitude during the complex process that a gender-equal peer review constitutes, for example by giving members room for reflection on central concepts, and as far as possible achieve a consensus on these. This can advantageously be done at the start of the review panel meeting, once the members have made a first assessment of the applications. Such a discussion can increase the possibility of achieving a more congruent assessment.

A form of bias that may arise in the panel discussions is that the subject choice of an application, as well as the choice of scientific method, may affect the panel member's assessment. In this context, the question can be asked whether these, and perhaps additional factors, interplay with gender; a question that may be valuable to bring into the panel member's reflection on possible bias in the assessment of applications.

Continue informing about the importance of not adding informal information

Continue informing about the importance of not adding informal or irrelevant information during the discussion of an application.

Members often want to assist with information that have about an applicant in order to provide support, both to the process and to the applicant. However, this might mean that incorrect information, or data that cannot be confirmed, impacts

on the assessment process, or that panel members' networks have an impact on the Swedish Research Council's assessment processes, which is undesirable. It is important that the applications are assessed in an equivalent and objective way, and that it is the contents of the application that form the basis for the assessment.

Continue to emphasise instructions and guidelines

Maintain the procedure that formalia questions about instructions and guidelines are dealt with in detail at the start of the review panel meeting, as this provides good support for members and others taking part in review panel meetings. According to the observers, formalia questions occupy a considerable amount of room during the discussions in some of the review panels, for example through the Swedish Research Council personnel reminding members of a guideline, or clarifying an instruction when required, which provides further support to panel members and other meeting participants.

Continue to highlight the issue of assessment of competence and merit

The Swedish Research Council is recommended to continue to emphasise and clarify the instruction relating to the assessment of the applicant's competence given to the panel members ahead of their assessment work. For example, it is important to continue pressing for merits to be assessed in relation to career age, and that the panel needs to take deductible time into consideration in the assessment.

It is a good idea to inform the members that in the event the review panel places the emphasis on the applicant's competence and merits, this might favour the group of senior researchers, which is dominated by men. A consequence of this can be that it makes it more difficult for the review panel and the Swedish Research Council to reach the goal of gender-equal success rates.

The panel chair and Swedish Research Council personnel should also be encouraged to increase vigilance during review panel meetings of aspects relating to the goal of gender-equal success rates. If divergencies are noted, the pre-set pause meetings, where the chair, observer, and Swedish Research Council personnel take part, can be used to discuss any corrective measures.

The Swedish Research Council can also consider refraining from hiding the column showing gender; this to contribute to increased transparency for the panel members.

References

<u>CoARA - Coalition for Advancing Research Assessment Downloaded 16 April</u> 2024.

<u>Diskrimineringslag (2008:567) | Sveriges riksdag (riksdagen.se)</u> Downloaded 19 March 2024.

Equality Ombudsman: www.do.se. Downloaded 17 April 2024.

European Commission: Gender Issues in Recruitment, appointment and promotion processes – Recommendations for a gender sensitive application of excellence criteria. Expert report ER-Festa-2015. <u>5.1.2. Gender Issues in Recruitment, Appointment and.pdf (festa-europa.eu)</u>.Downloaded 17 April 2024.

Fangen Katrine: Deltagande observation, Malmö 2005.

Förordning (2009:975) med instruktion för Vetenskapsrådet. Svensk författningssamling 2009:975.

Holme Idar Magne & Krohn Solvang Bernt Forskningsmetodik. Om kvalitativa och kvantitativa metoder, Lund 1997.

Latour Bruno, Woolgar Steve & Salk Jonas 2nd ed. Laboratory Life: The Construction of Scientific Facts, Princeton 1986.

Riksbankens Jubileumsfond, Husu, Liisa and Callerstig, Anne-Charlott: Riksbankens jubileumsfonds beredningsprocesser ur ett jämställdhetsperspektiv RJ rapporterar 2018:1

Skarsgård Kajsa: Undvik genusfällor för att få mer likvärdig rekrytering. Universitetsläraren 2016.

Tillväxtverket: Under ytan. Hur går snacket och vem får pengarna? Tillväxtverket 2015.

Traweek Sharon: Beamtimes and Lifetimes: The World of High Energy Physics, Harvard 1992.

Proxy - Wikipedia downloaded 3 January 2024.

Vetenskapsrådet

Published

A gender-neutral process? Swedish Research Council 2015. <u>A gender neutral process?</u> - Swedish Research Council (vr.se).

A gender-neutral process. Swedish Research Council 2017. <u>A gender-neutral</u> process - Swedish Research Council (vr.se).

A gender-equal process. Swedish Research Council 2020. <u>A gender-equal process</u> - Swedish Research Council (vr.se).

How gender-equal is higher education? Women's and men's preconditions for conducting research. Swedish Research Council 2021. <u>How gender-equal is higher education? Women's and men's preconditions for conducting research - Swedish Research Council (vr.se).</u>

How members of the board and scientific councils are appointed - Swedish Research Council (vr.se) Downloaded 19 March 2024.

Jämställdheten i Vetenskapsrådets forskningsstöd 2011-2012. Vetenskapsrådet 2014. <u>Jämställdheten i Vetenskapsrådets forskningsstöd 2011–2012 - Vetenskapsrådet (vr.se) (With a summary in English).</u>

Jämställdhet i Vetenskapsrådets miljöstöd och excellenssatsningar. Utfall av utlysningar gjorda 2004–2016. Vetenskapsrådet 2018. <u>Jämställdhet i</u> Vetenskapsrådets miljöstöd och excellenssatsningar - Vetenskapsrådet (vr.se)

Könsbias i forskningsfinansieringens bedömningsprocesser. En studie av Vetenskapsrådets bedömning av ansökningar inom utbildningsvetenskap. Vetenskapsrådet 2023. Könsbias i forskningsfinansieringens bedömningsprocesser - Vetenskapsrådet (vr.se)

Observations on gender equality in a selection of the Swedish Research Council's evaluation-panels 2012. Swedish Research Council 2013.

Observations on gender equality in a selection of the Swedish Research Council's evaluation-panels 2012 - Swedish Research Council (vr.se).

Peer review handbooks: Artistic research (Research project grant, International postdoc, and Research environment grant 2024); Educational sciences (Research project grant 2024); Humanities and social sciences (Research project grant 2024); Medicine and health (Research project grant, starting grant, consolidation grant, and grant for research time 2024); Natural and engineering sciences (Research project grant and starting grant 2023). Peer Review Handbooks - Swedish Research Council (vr.se). Downloaded 17 April 2024.

The Swedish Research Barometer 2023 <u>The Swedish Research Barometer</u> 2023 - Swedish Research Council (vr.se).

Not published

Policy för jämställdhetsintegrering 1.2.4-2022-06681. Vetenskapsrådet 2022. Diarienummer 1.2.4-2022-06681.

Riktlinjer för jämställdhet i processen finansiera forskning. Vetenskapsrådet 2024. Diarienummer 1.2.4-2024-00116.