

# LEARNED SOCIETIES AND RESPONSIBLE RESEARCH

RESULTS OF THE SURVEY  
FOR THE TSV  
MEMBER SOCIETIES

AUTHORS

Elina Late, Janne Pölönen and Elina Pylvänäinen



Federation of Finnish  
Learned Societies

**Learned Societies and Responsible Research.  
Results of the survey for the TSV member societies.**

AUTHORS: Elina Late, Janne Pölönen, Elina Pylvänäinen

PUBLISHER AND YEAR OF PUBLICATION: The Federation of Finnish Learned Societies, 2022

SERIES: Web publications of Federation of Finnish Learned Societies 11

ISSN: 2242-8011

ISBN: 978-952-5995-54-1

DOI: [10.23847/tsv.219](https://doi.org/10.23847/tsv.219)

# CONTENTS

<b>Abstract</b>	<b>4</b>
<b>1. Introduction</b>	<b>5</b>
<b>2. Learned societies</b>	<b>7</b>
<b>3. The Federation of Finnish Learned Societies and responsible research</b>	<b>9</b>
<b>4. Survey</b>	<b>12</b>
<b>5. Findings</b>	<b>14</b>
5.1 Activities of the societies	<b>14</b>
5.2 Activities linked to open science	<b>17</b>
5.2.1 A culture for open scholarship	<b>17</b>
5.2.2 Open scholarly publishing	<b>17</b>
5.2.3 Open research materials	<b>18</b>
5.2.4 Open education	<b>19</b>
5.3 Activities linked to research integrity	<b>20</b>
5.4 Research evaluation	<b>21</b>
5.5 Responsible research documents signed and processed by the societies	<b>24</b>
5.6 Developing the societies' operations	<b>27</b>
5.7 The effects of the pandemic on the societies' operations	<b>28</b>
<b>6. Conclusions</b>	<b>30</b>
<b>Acknowledgements</b>	<b>32</b>
<b>References</b>	<b>33</b>
<b>Appendix 1: Questionnaire</b>	<b>36</b>

# ABSTRACT

## OBJECTIVE

- The Federation of Finnish Learned Societies (TSV) studied its member societies' activities related to responsible research in connection to open science, research integrity and research evaluation. In addition to these areas, the study covered the societies' scientific activities and activities promoting societal impact, as well as the effects of the coronavirus pandemic on the societies' ability to operate.

## METHOD

- The research data was gathered through a survey carried out in November 2021. A total of 116 member societies, representing various fields, responded to it. The response rate was 40%.

## MAIN FINDINGS

- The promotion of scientific activities and general understanding of science are amongst the key objectives steering the operations of learned societies. Approximately 90 per cent of the societies strive towards these objectives by organising scientific events and/or publishing scientific findings.
- When it comes to open science, activities linked to a culture for open scholarship and open scholarly publishing are some of the most important ones in learned societies. Around 70 per cent of the societies participate in developing open science, while 60 per cent publish immediately openly available publications. However, activities linked to open research data and open education are rarer.
- Activities connected to research integrity are typically not part of learned societies' operations, or they only constitute a small segment of the operations. Just a few societies reported incidents where responsible conduct of research had been violated during their operations.
- The majority of the societies carry out activities connected to evaluating the scientific quality and societal impact of research. For example, nearly 80 per cent utilise peer review in their publications and propose experts to evaluation panels. However, determining field-specific evaluation criteria is rare.
- In the future, over 50 per cent of the societies intend to propose more members e.g. to working groups and as evaluators, take part in the development of open science, hold more events and participate in recognising experts in their particular scientific field.

## CONCLUSIONS

- Generally speaking, the promotion of responsible research has not yet become widely established, key part of learned societies' operations. However, in the future, the societies could have a more significant role in the field-specific development of open science, research integrity and research evaluation in the fields they represent.

# 1. INTRODUCTION

**IN FINLAND THERE ARE** hundreds of learned societies that aim to promote science and the operating conditions of their fields in Finland and elsewhere through their operations. Their core activities include science communication and facilitating a dialogue by organising various events and publishing journals and other publications.

Over the past few years, responsible research has become a major factor when discussing the work carried out by research organisations and researchers. Responsible research is deemed to promote a reliable and generally accepted way of producing, publishing and evaluating research-based knowledge (see <https://vastuullinentiede.fi/en>). In global dialogue, the concept of responsible research and innovation has been defined through six themes: social interaction, gender equality, science education, open access to research outputs, research integrity and research management (see Rask, Kahma and Mattila, 2020; Mustajoki, Mustajoki and Must, 2020). UNESCO recently published a Recommendation on Open Science, according to which open science covers a vast number of elements, including open research data, open research infrastructures, science communication and interaction with society's operators (UNESCO, 2021; Open Science, 2022). The European Commission, on the other hand, has highlighted responsible researcher evaluation as one of the main themes of scientific policies. Evaluation processes should be enhanced in order to factor in different types of research output and researcher roles in an increasingly diverse way and to assess the use of various metrics as part of the evaluation (European Commission, 2021; Open Science, 2021). The objectives are in line with *the Good Practice in Researcher Evaluation* created by the Finnish research community (Working group for responsible evaluation of a researcher, 2020).

Because learned societies have a notable role in promoting and communicating science at a national level, they also have an opportunity to promote responsible research in Finland. Therefore, it is important to know how and to what extent societies have factored in this angle in their operations. This report assesses learned societies' operations in connection to responsible research particularly open science as well as research integrity and research evaluation. It also provides more insight into the operations of learned societies and, in particular, new information about the societies' roles in terms of societal impact. The research questions that gave direction to the study included:

1. How pivotal are duties linked to scientific activities to the societies' operations?
2. How pivotal are duties linked to societal impact to the societies' operations?
3. How pivotal are different forms of operation linked to open science to the societies' operations?
4. How pivotal are different forms of operation linked to research integrity and responsible conduct of research to the societies' operations?

5. What type of activities linked to evaluating the scientific quality of research do the societies carry out?
6. What type of activities linked to evaluating the societal impact of research do the societies carry out?
7. How has the coronavirus pandemic affected the societies' operations?

A comprehensive report of the operations of Finnish learned societies was compiled in 2019 (Korkeamäki et al., 2019). This report complements the earlier one by painting an up-to-date and more detailed picture of the societies' activities linked to the promotion of scientific operations and societal impact. In terms of open science, the previous report focused mainly on the societies' publishing work. In addition to publishing, this report studies other areas of open science as well. Neither the 2019 report nor any other previous reports have assessed activities carried out by Finnish societies in connection to research integrity or research evaluation. This report also looks at the effects of the coronavirus pandemic on the societies' operations. Moreover, the report can help anticipate the types of roles that learned societies may want to take in the future and the ways in which the Federation of Finnish Learned Societies can support the societies in these roles.

The material for the report was collected in the form of a questionnaire, to which responses from the Federation's member societies were requested in November 2021. A total of 116 learned societies responded to the survey. The data collection is described in detail in Chapter 4 of this report. Before that, the main concepts and operators related with learned societies and responsible research in Finland are represented in Chapters 2 and 3. The survey findings are illustrated in Chapter 5. Finally, the conclusions based on these findings are discussed in Chapter 6. The questionnaire that was used can be found as an appendix at the end of the report.

## 2. LEARNED SOCIETIES

**LEARNED SOCIETIES ARE** non-profit organisations that promote research and bring together researchers and amateur scientists across organisation and geographic borders. Finnish learned societies are mainly run by volunteers. However, the societies' operations vary greatly: they may have differing goals, they vary in size, ways of operating and they have different resources at their disposal. However, they all aim to promote research and distribute scientific information to the scientific community and the public. (Korkeamäki et al., 2019; Heikkilä, 2002; Hopkins, 2011.) For example, the societies publish scientific journals, organise conferences and take part in societal influencing by popularising research, among other means (Korkeamäki et al., 2019; Hewitt, Dingwall and Turkmendag, 2017). In Finland, learned societies are important scholarly publishers, since they publish the majority of Finnish scientific journals (Late et al., 2020). Furthermore, some societies also aim to promote the activities of a specific professional or amateur group. The report titled *Learned Societies in Finland 2018* by Korkeamäki et al. (2019) gives a comprehensive description of the operations of learned societies in Finland.

Korkeamäki et al. (2019) studied the activities of learned societies in connection to the promotion of open science. At the time, nearly half of the societies were publishing an open access journal, while some were planning to adopt open scholarly publishing. However, publishing open access monographs was still rare in 2018. It is clear that the lack of a funding model for open publications has prevented some societies from moving on to open scholarly publishing. In 2018, roughly half of the societies were allowing the self-archiving of their publications. Learned societies' publications are more often openly accessible than those of commercial publishers in Finland (Late et al., 2020). Regarding research materials, approximately half of the respondent societies in the 2019 survey stated that they encourage open access of research data. About a fifth of them utilised open peer review in their publications. The report by Korkeamäki et al. also discusses other forms of open science activities that societies have, such as having a culture for open scholarship, holding open events and participating in the development of open science. However, these areas were not studied in detail in the 2019 survey. The Ministry of Education and Culture's Evaluation of Open Science Maturity from 2019 covered four Finnish science academies (Forsström, Lilja and Ala-Mantila, 2019). The academies' maturity was determined to be at the lowest levels. The open science maturity level of other learned societies has not been evaluated.

No information currently exists on the activities of Finnish learned societies linked to research integrity. Based on an international study by Hastings et al. (2022), only some (25%) of the 245 European societies provided research integrity guidelines. Societies operating in the fields of social sciences or medicine were most likely to provide these guidelines, in comparison to societies that deal with natural sciences, humanities or technology. Furthermore, if provided, the guidelines varied between disciplines. In societies operating in the field of medicine, the guidelines focused on regulations, while societies in the field of natural sciences focused more on matters pertaining to publishing research findings. The ethical guidelines of societies operating in humanities and social sciences are more heterogenic and often connected to the specific questions of their sector. (Hastings et al., 2022.) For example in the UK,

the Academy of Social Sciences aims to advise its member societies on how to determine guidelines for research integrity in their field. However, the member societies have been active in defining their own guidelines, which has led to some confusion (Dingwall, Iphofen, Lewis et al., 2017). Therefore, it is interesting to see how many Finnish learned societies provide research integrity guidelines and what the societies' role is in determining what research integrity means in their own fields. Since many societies serve as publishers and actively organise events such as conferences, it is interesting to find out how often they encounter violations of the responsible conduct of research and how they react to these allegations. For example, Ravn and Sørensen (2021) have shown that elements connected to research integrity and incidents of violating the responsible conduct of research vary between the disciplines and are linked to the disciplines' research procedures. Therefore, societies may play an important role in defining the ethical guidelines for their individual fields.

Learned societies have a significant role in Finnish research evaluation, particularly when it comes to peer review carried out as part of the publishing processes. Some learned societies also grant funding and rewards for research (Korkeamäki et al., 2019), which requires research evaluation. Furthermore, learned societies are also asked to appoint members to various boards, committees and panels promoting and supporting science, and these in turn evaluate research (e.g. Publication Forum panels). In other countries, such as the UK (Oancea, 2019) and Norway (Sivertsen, 2016), learned societies are also utilised in recognising and appointing experts. However, so far no overall understanding exists of how actively societies participate in evaluating the scientific quality or societal impact of research in Finland.



### 3. THE FEDERATION OF FINNISH LEARNED SOCIETIES AND RESPONSIBLE RESEARCH

**FOUNDED IN 1899**, the Federation of Finnish Learned Societies is a cooperation organisation for Finnish learned societies. Its duties are regulated by law (the Act on the Federation of Finnish Learned Societies 938/2006). The statutory duties of the Federation include supporting the cooperation and operations of its member societies, developing scholarly publishing and information distribution, organising international exchange of scientific literature, and increasing awareness and use of research data in society. The Federation uses state awards, received from the Ministry of Education and Culture, to support its member societies' operations.

The Federation has 291 member societies that operate in various fields. The societies are asked to inform the Federation's membership register which discipline(s) they represent, and most of them have stated that they represent multiple ones. In Table 1, the disciplines have been divided according to the five main branches. The table illustrates how the emphasis is particularly on humanities and social sciences. However, all the main branches are represented by the societies.

**Table 1.** *The disciplines represented by the societies. The membership register of the Federation of Finnish Learned Societies. N=291*

	n	%
Humanities	109	38
Social sciences	99	34
Natural sciences	61	21
Medical and health sciences	48	17
Technical sciences	43	15
Society represents all disciplines	8	3

The Federation of Finnish Learned Societies groups operators under the umbrella term of responsible research who, through their actions, aim to promote and support the responsible development of open science, scholarly publishing, science communication, research integrity and research evaluation in Finland. The group includes Open Science Coordination in Finland (AVOTT), the Publication Forum (JUFO), the Committee for Public Information (TJNK) and the Finnish National Board on Research Integrity (TENK). This report was created in collaboration with these operators, and therefore its perspective originates from the duties of each specific sector. One of the report's objectives is to provide knowledge for developing the activities to better serve the needs of the Federation's member societies.

Policies pertaining to open science have been systematically developed in Finland since the early years of the 2010s. In 2018, the Ministry of Education and Culture assigned the Federation of Finnish Learned Societies with the task of *coordinating open science and research*. The coordination model is based on the cooperation between working groups, expert panels and the Steering Group, and the participants include universities, research institutes, funders, libraries and archives. The aim of the coordination is to facilitate a dialogue within the research community about the objectives and means of open science, and increase cooperation and awareness of the opportunities afforded by open science, of its challenges and of solutions to them. The coordination work includes four expert panels: Culture for Open Scholarship, Open Scholarly Publishing, Open Research Materials and Open Education. The open science coordination and the related expert panels publish policies and recommendations connected to open science that steer open science related activities in Finland.

*The Finnish National Board on Research Integrity (TENK)* is a body of experts under the Ministry of Education and Culture that promotes responsible conduct of research, prevents research misconduct and facilitates debate and communications regarding research integrity. The Ministry appoints TENK's members based on the scientific community's proposals. TENK creates national research integrity guidelines, holds seminars, provides training, coordinates the ethical review in human sciences, and forms domestic and global networks. TENK also monitors and creates statistics on violations of responsible conduct of research, makes statements and provides advice in problematic situations.

*The Publication Forum (JUFO)* is a publication channel classification system that operates under the Federation and supports evaluation of research quality. The Publication Forum evaluates scientific publication forums, including journals, conferences and book publishers. The evaluation is carried out by 23 discipline-specific expert panels consisting of approximately 300 scholars of merit who are either Finnish or live in Finland. The classification provides information about scientific publication channels' impact and how highly regarded they are amongst the scientific community. The aim is to encourage Finnish researchers to publish their research findings on high-quality Finnish and foreign forums. The classification system has been used as the quality indicator of scholarly publications produced by universities since 2015 as part of a university funding model introduced by the Ministry of Education and Culture.

*The Committee for Public Information (TJNK)*, founded in 1972, is a body of experts under the Ministry of Education and Culture, which tracks the scientific, artistic and technological achievements in Finland and abroad, as well as the developments in other domestic and global information. TJNK's key operations include its proposals for the recipients of the State Awards for Public Information and purchase subsidies. TJNK also grants targeted public information grants, makes statements and promotes training in science communication and non-fictional writing. Since 2014, the Federation of Finnish Learned Societies has provided a peer-review label to 237 Finnish publishers and publication series that have undergone a review by at least two independent experts.

The promotion of responsible peer reviews is a joint objective of the Federation and the responsible scientific operators that work with it. Since 2012, responsible reviewing has been promoted by TENK's *Guidelines on Responsible Conduct of Research and Researcher's Curriculum Vitae Template*, as well as the *User guide for the Publication Forum Classification*. In 2019, the Federation, JUFO, AVOTT and TJNK launched an international Helsinki Initiative, whose aim is to encourage distribution of research data to a wider audience outside the scientific community, support national publication channels that enable multilingual publication, and promote a multilingual approach in research evaluation and funding systems. Based on extensive collaboration within the Finnish scientific community, led by the Federation, *the Good practice in researcher evaluation* from 2020 is amongst the first national sets of instructions on responsible reviews in the world.

## 4. SURVEY

**THE RESEARCH MATERIAL** was collected through a questionnaire sent to the member societies of the Federation of Finnish Learned Societies (see Appendix 1). The questionnaire was created by the Federation in cooperation with responsible scientific operators.

Before the material was collected, the questionnaire was piloted by representatives of three learned societies. Based on the feedback, it was subsequently edited. The questionnaire contained 24 questions, in addition to which the respondents were able to leave comments on their answers under open-ended questions.

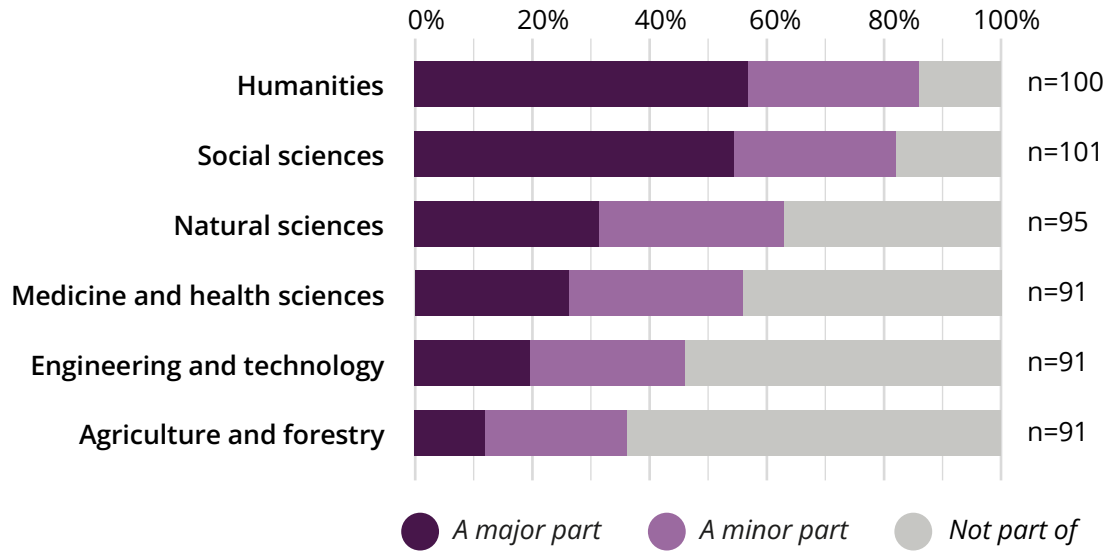
The questionnaire was created by using LimeSurvey, and it was available in Finnish only. However, the respondents were given an opportunity to use a language of their choice when answering the open-ended questions. The invitation to the survey was sent to 291 Federation member societies via email. In addition to that, it was shared on the Federation's Facebook and Twitter accounts, and website. The questionnaire was open from 1 to 30 November 2021.

A total of 127 responses were received, of which 116 were included in the final analysis. Each society is represented by one respondent in the material. The response rate was 40 per cent. Any responses where the respondent had only answered the background questions were excluded from the material. Additionally, some societies had submitted more than one response, in which case the responses were carefully read through and the one with the highest number of answered questions was selected. The number of respondents varies between the questions, because the respondents were allowed to leave questions unanswered. The research material was analysed using distributions and averages. The survey's open-ended questions were analysed through categorisation.

Most (84%) of the respondents serve as the chairperson, executive director or secretary general of their society. The others serve as their society's secretary (10%), board member (3%) or in another role (3%), such as an employee or a journal's editor-in-chief.

The societies represented by the respondents operate in various fields, although the main focus is on humanities and social sciences (Figure 1). This also corresponds more widely with the Federation member societies' distribution according to discipline (Table 1). However, the majority (78%) of the societies represented by the respondents operate in more than one field.

It is likely that the survey was responded to by actively operating societies who perhaps also carry out activities linked to responsible research. Therefore, societies whose operations are less active and unrelated to responsible research are probably in the minority in the material. However, based on the information at hand it is impossible to assess the material's representativity any further.



**Figure 1.** Disciplines represented by the societies that responded to the survey.

# 5. FINDINGS

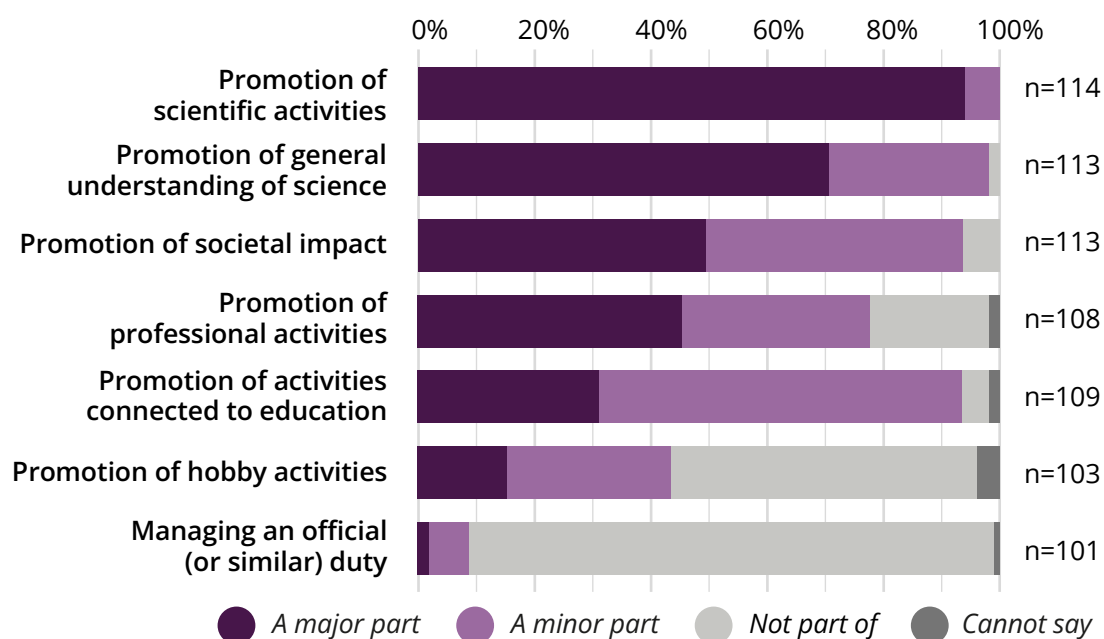
## 5.1 ACTIVITIES OF THE SOCIETIES

The promotion of scientific operations describes well what the Federation member societies do, as 94 per cent of the respondents felt that this was a key part of their society's activities (Figure 2). Additionally, the promotion of general understanding of science is a main part of the operations for most of the societies. Roughly half of the respondents felt that the promotion of a societal impact was a main part of their activities.

Nearly half of the respondents thought that the promotion of professional activities was a key part of their society's operations, while the promotion of activities linked to studying was a key element to approximately one third of the respondents, and at least a minor one to more than 90 per cent. The promotion of amateur activities, as well as work carried out with the officials and other similar activities, were significantly rarer in the learned societies. In the open-ended answers, the respondents stated that work carried out with the officials and other similar activities involves giving statements e.g. on draft legislation and rules, when requested by the authorities. Some societies also have statutory duties.

Several societies also mentioned in the open-ended answers that their duties include the creation and administration of national and international networks. The community spirit within a discipline was also highlighted in the answers. Furthermore, some societies felt that one of their objectives was to maintain communication between the experts, amateurs and researchers in their field.

*"A forum where researchers can discuss the latest research findings and conducting research, but also a forum where researchers and experts who actively use scholarly knowledge in their work can talk."*

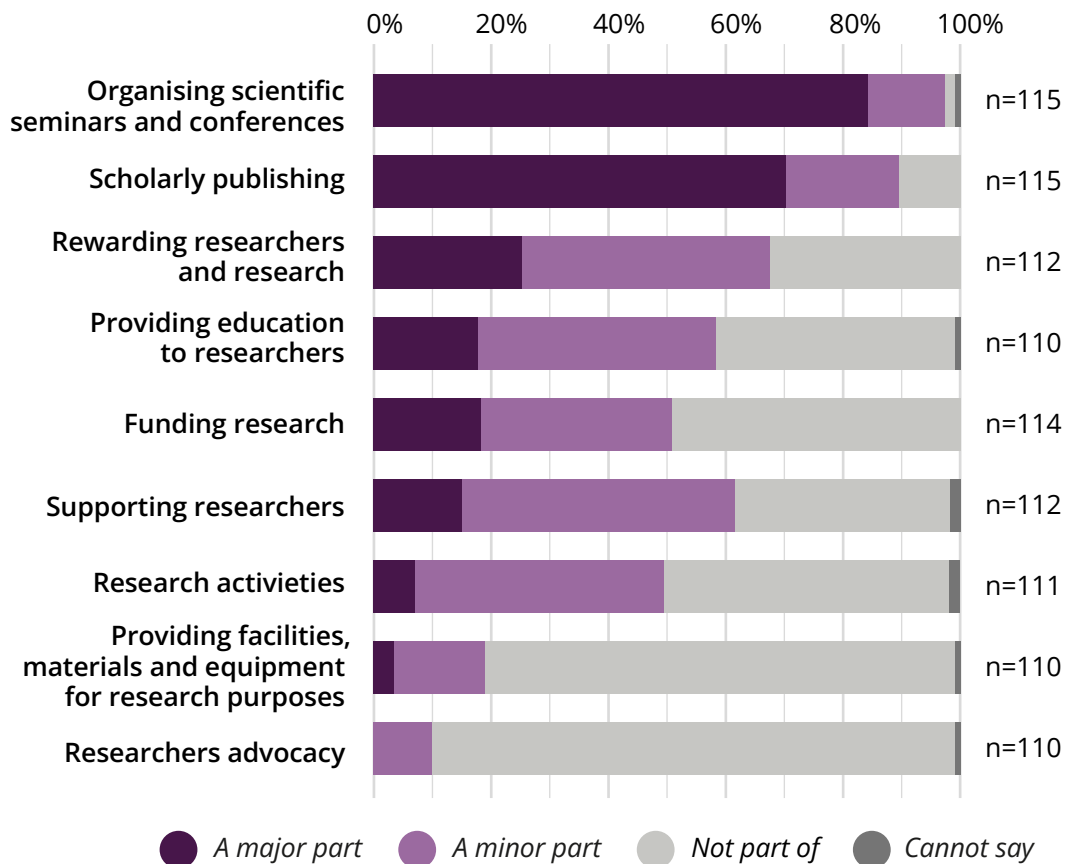


**Figure 2.** The operational objectives of the societies.

The survey also collected more detailed information about the societies' duties connected to scientific activities (Figure 3) and societal influencing (Figure 4). In connection to scientific activities, the societies' activities typically included holding scientific seminars and conferences. This was a main part of operations to more than 80 per cent of the societies. Scholarly publishing is also part of the operations of most of the respondent societies. Less typical or less important activities include rewarding researchers and research, providing training to researchers, funding research and supporting researchers, for example through mentoring. Activities that are clearly rarer amongst the learned societies include research activities (e.g. research projects and material collection), providing facilities and material to researchers, and looking after the interests of researchers. However, the first two are a key part of a few societies' operations.

A few societies provided more details about their duties in their open-ended answers. They mentioned arranging meeting places for researchers, organising forums, and monitoring and influencing science-related policies. Furthermore, the development of support services for research was part of some societies' operations.

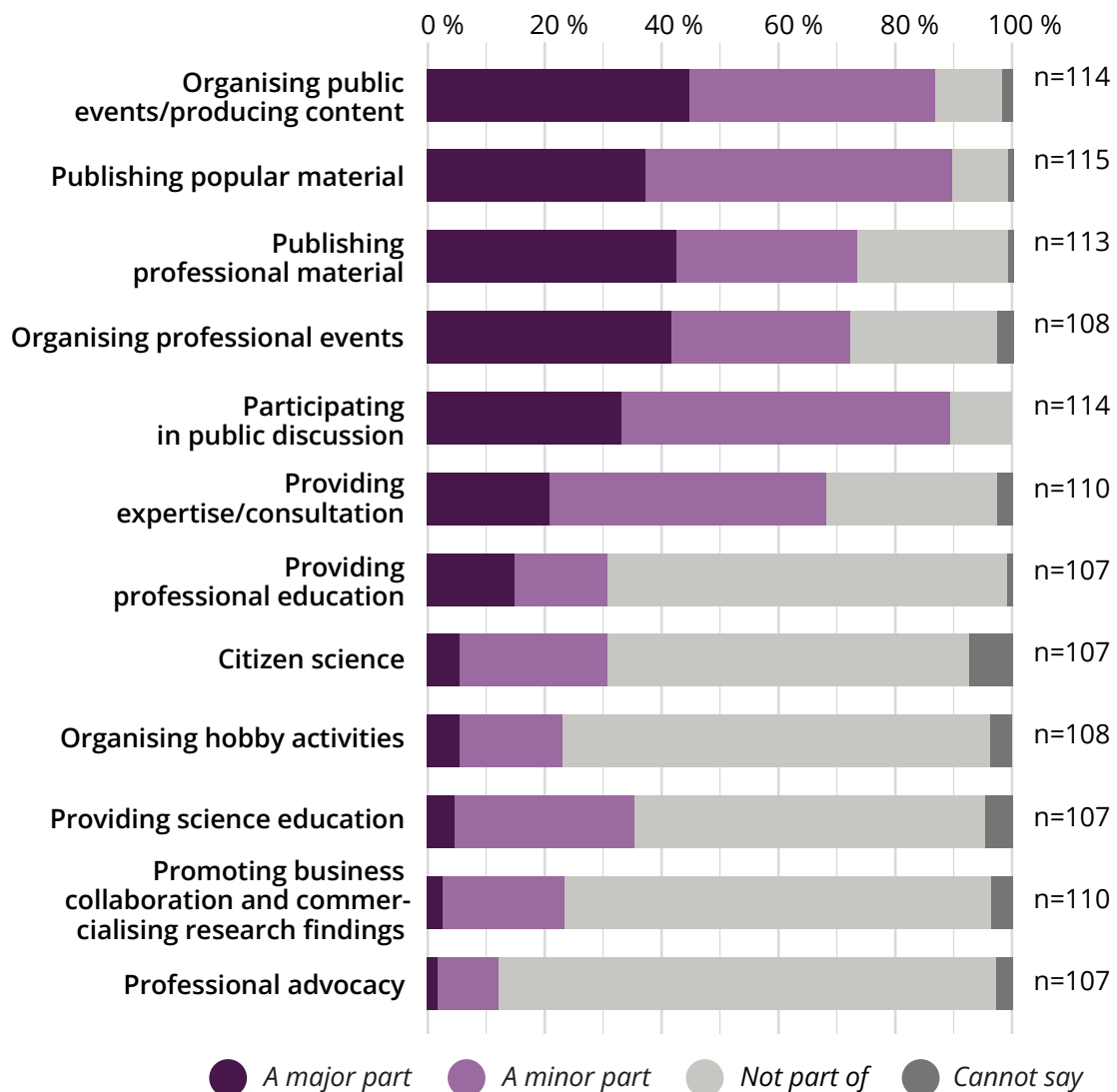
*"We promote the development of support services for research through our operations."*



**Figure 3.** How pivotal are the following duties linked to the promotion of scientific activities to your society's operations?

The main activities of learned societies linked to societal influencing include organising public and professional events, and publishing popular and professional material (Figure 4). Most of the societies also take part in public debate, and provide consultation and expertise at least as a minor part of their operations. This entails giving statements, among other things. When giving a statement, a society’s chairperson typically decides on the statement with the board or functionaries (76%). Rarer methods include forming a working group to issue a statement (16%) and discussing the statement with the members (1%). However, these methods vary according to the situation.

Rarer societal influencing methods include providing professional training, engaging citizen and professional participation in research (citizen science), organising hobby activities, providing science education, promoting cooperation and looking after professional interests. Other activities mentioned in the open-ended answers included organising nature walks, answering questions from the public and sharing information with the members about international events.



**Figure 4.** How pivotal are the following duties linked to societal impact to your society’s operations?

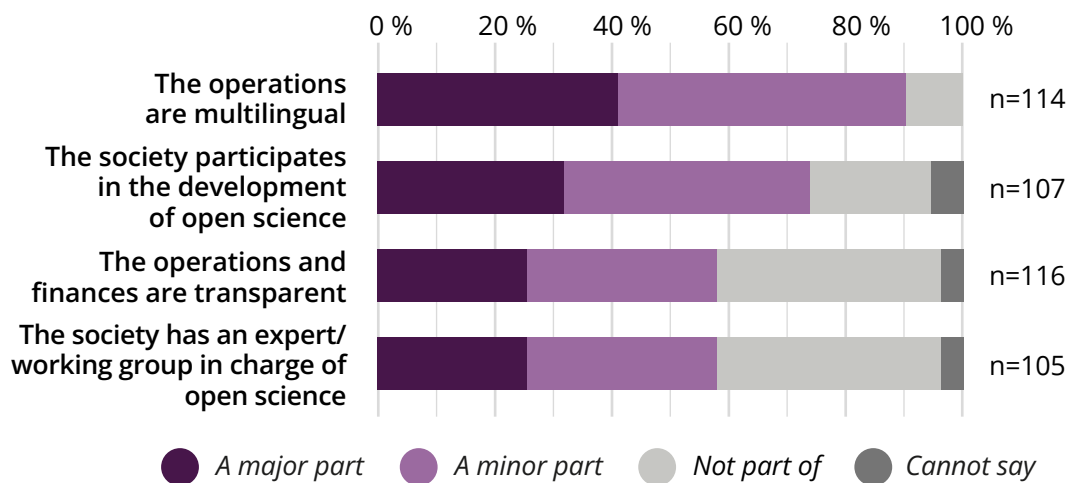


## 5.2 ACTIVITIES LINKED TO OPEN SCIENCE

Open science is an umbrella term that refers to the various open ways of operating in research. The survey studied the societies' duties connected to open science through four groups of questions, which were linked to a culture for open scholarship, open scholarly publishing, open research materials and open education.

### 5.2.1 A culture for open scholarship

A culture for open scholarship is seen as a cornerstone of open science, affecting every stage of a research process. This type of culture is strongly reflected in the research organisations' operations, such as their evaluation practices, incentives and services. The promotion of a culture for open scholarship is part of most societies' operations (Figure 5), and its most common form is multilingual activities. This is a pivotal part of the operations of approximately 40 per cent of the societies, and 90 per cent operate in multiple languages at least partly. To one third, participation in the development of open science is a key part of their operations. Furthermore, more than half of the societies feel that their operations and finances are transparent and have founded a working group to be in charge of open science.



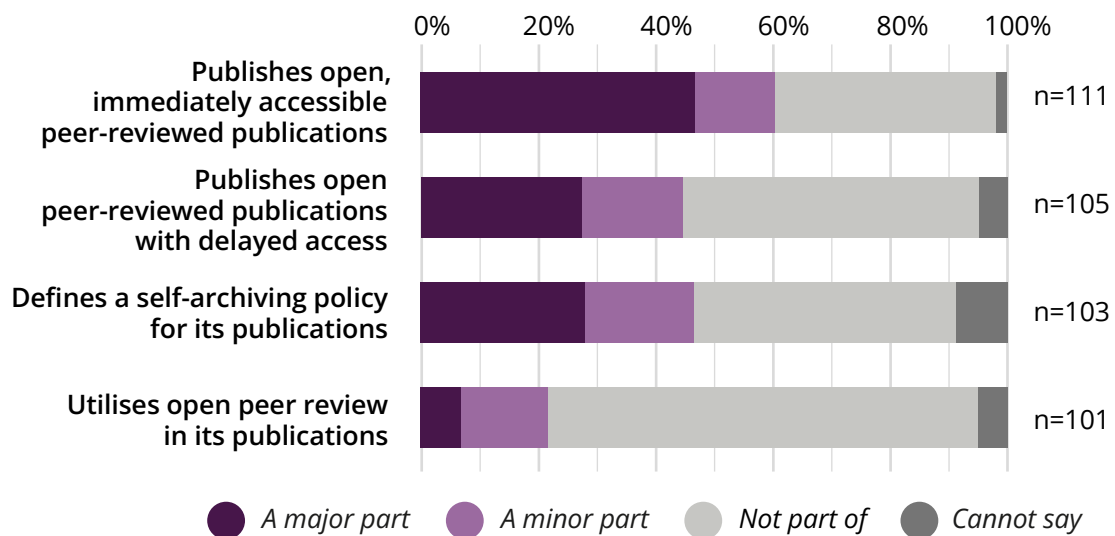
**Figure 5.** How pivotal are the following forms of a culture for open scholarship to your society's operations?

### 5.2.2 Open scholarly publishing

Open scholarly publishing is perhaps the most well-known and widely discussed form of open science. Learned societies are active scholarly publishers at a national level, as 60 per cent of the survey respondents stated that they publish open, immediately accessible peer-reviewed material (Figure 6). In addition to that, just under half of the societies publish open peer-reviewed publications with delayed access. The open-ended answers indicate that copyrights, data protection and contractual restrictions may occasionally delay open scholarly publishing.

*“The society retrospectively publishes material with open access when it becomes possible in terms of copyrights, data protection, contracts and other restrictions.”*

Open scholarly publishing entails more than just publishing original studies; instead, one society stated that it publishes summaries of previously published peer-reviewed publications on its website. Close to half of the respondents have defined a parallel publishing policy for their publications, describing the terms and conditions for it. Open peer reviews are relatively rare, indicated by the fact that it is a main or minor part of the operations of only one fifth of the respondents.



**Figure 6.** How pivotal are the following areas of open scholarly publishing to your society's operations?

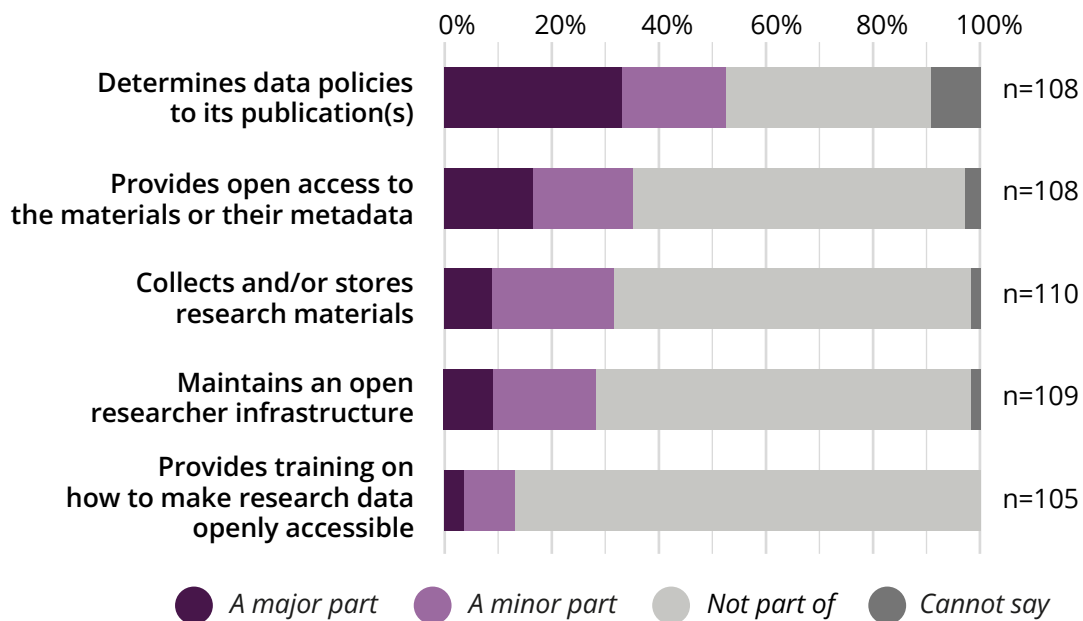
### 5.2.3 Open research data

Open research materials and methods are a main form of open science. When it comes to open research data, the most widely adopted form of operation amongst learned societies is determining material and data policies for a society's publications. Data policies define the principles regarding open access to material, for example whether material must be stored to open data archive before its publishing. One

third of the societies collect or store research data and provide open access to these or the material's metadata. Material collected and owned by a society is occasionally also kept in an external archive.

*“All the research data owned by the society and kept at the National Archives can be openly accessed.”*

Nearly a third of the respondents maintain open research infrastructure, but only a small number offer training on how to make research data openly available. However, for four societies this is a key part of their operations.



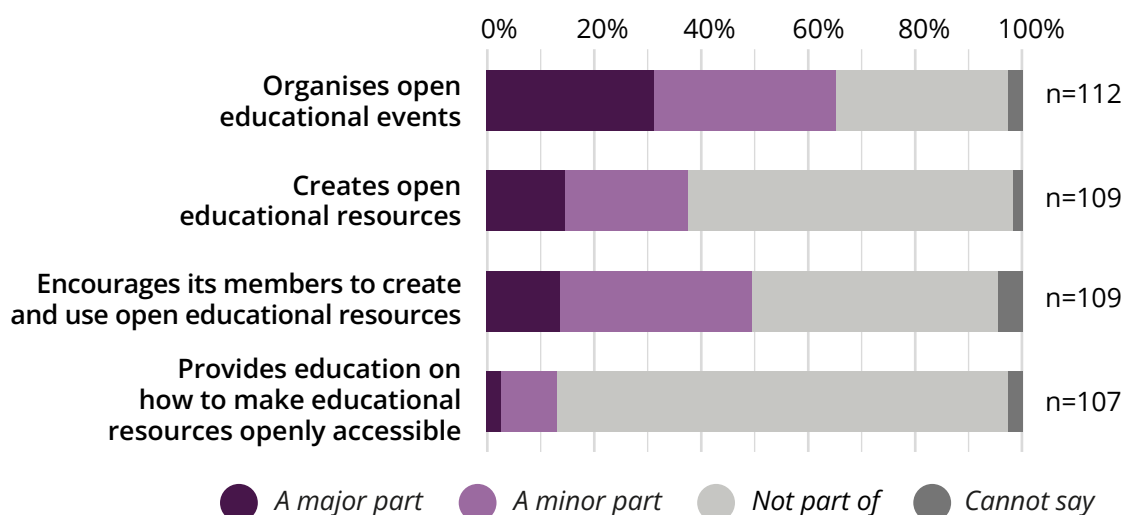
**Figure 7.** How pivotal are the following activities linked to open data to your society's operations?

### 5.2.4 Open education

Open education is perhaps the newest and so far the least well-known form of open science, but some of the societies are already promoting it in various means. The most common way is to organise open training events. Based on the survey, this is a main part of the operations of one third of the societies, and at least a minor part to 65 per cent (Figure 8). Education is also provided in cooperation with other organisations.

*“The society has a specific education committee, whose members also include comprehensive/general upper secondary school teachers. The society is also responsible for training in its discipline for the Science Olympics.”*

A slightly smaller proportion of the societies create open educational resources, and half of the respondents stated that they encourage their members to create and use open educational resources. However, providing training on how to make educational resources openly available is still rare, as only 13 per cent of the societies stated that they do so.



**Figure 8.** How pivotal are the following areas of open education to your society's operations?

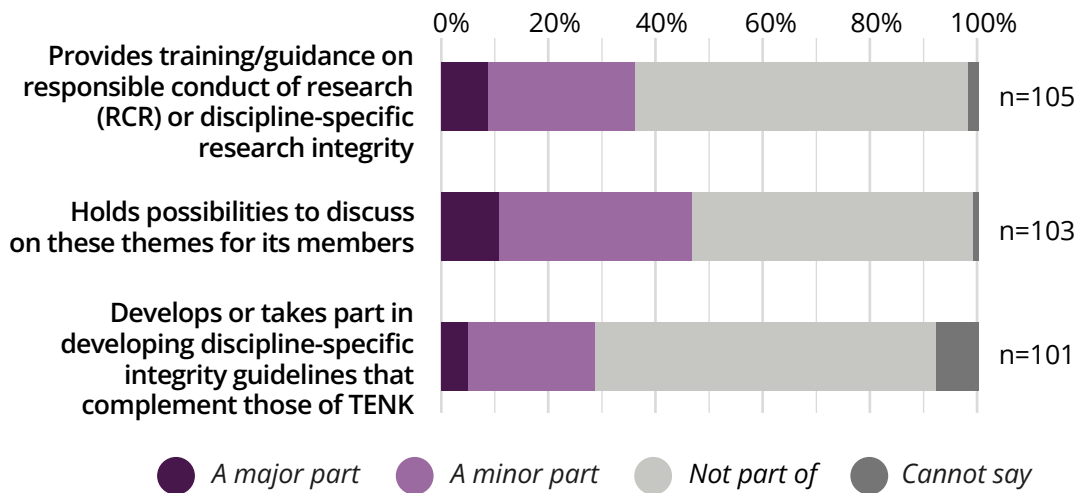
### 5.3 ACTIVITIES LINKED TO RESEARCH INTEGRITY

According to the findings, activities linked to research integrity have yet to become common. Only five societies have appointed a research integrity support person. However, 37 per cent of the societies organise training related to research integrity at least occasionally, while 47 per cent hold discussions connected to the theme (Figure 9). Sometimes, societies also publish research-integrity themed issues of journals. Moreover, nearly a third of the societies are taking some part in developing discipline-specific integrity guidelines that complement those of TENK. One respondent described their society's relationship with the promotion of research integrity in one of the open-ended answers:

*"We assume that higher education includes teaching students about responsible conduct of research and that research is carried out accordingly."*

Based on the survey, the number of allegations of misconduct when it comes to responsible conduct of research is low, with only five societies stating that such allegations have been made. The open-ended answers indicated that these allegations were connected to plagiarism and self-plagiarism. Furthermore, international activities may have a negative effect on operations, because researchers in some countries may not have a similar understanding of research integrity and e.g. the principles of peer reviewing.

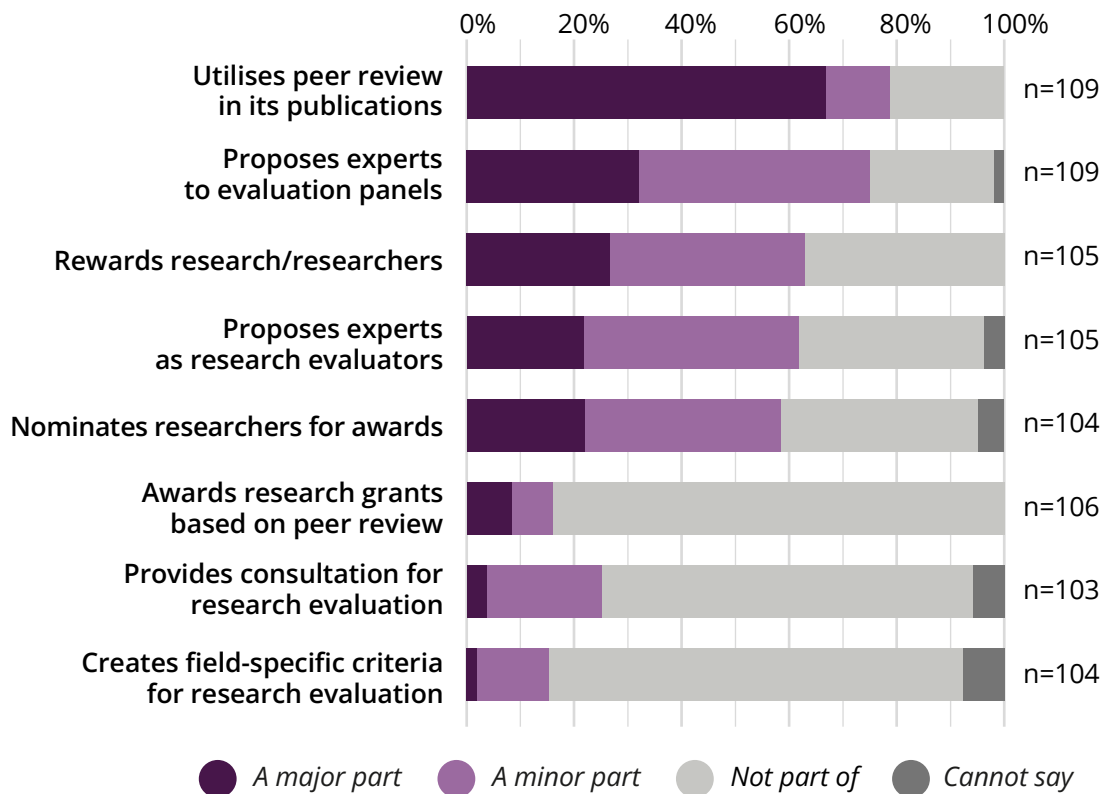
*"We operate as an international community in a vastly different culture of writing in comparison to Finland, and thus the unacceptability of plagiarism and other questions of integrity come as a surprise to our members relatively often. Additionally, the principles of peer reviewing remain unfamiliar to many."*



**Figure 9.** How pivotal are duties linked to responsible conduct of research (RCR) or discipline-specific research integrity to your society's operations?

### 5.4 RESEARCH EVALUATION

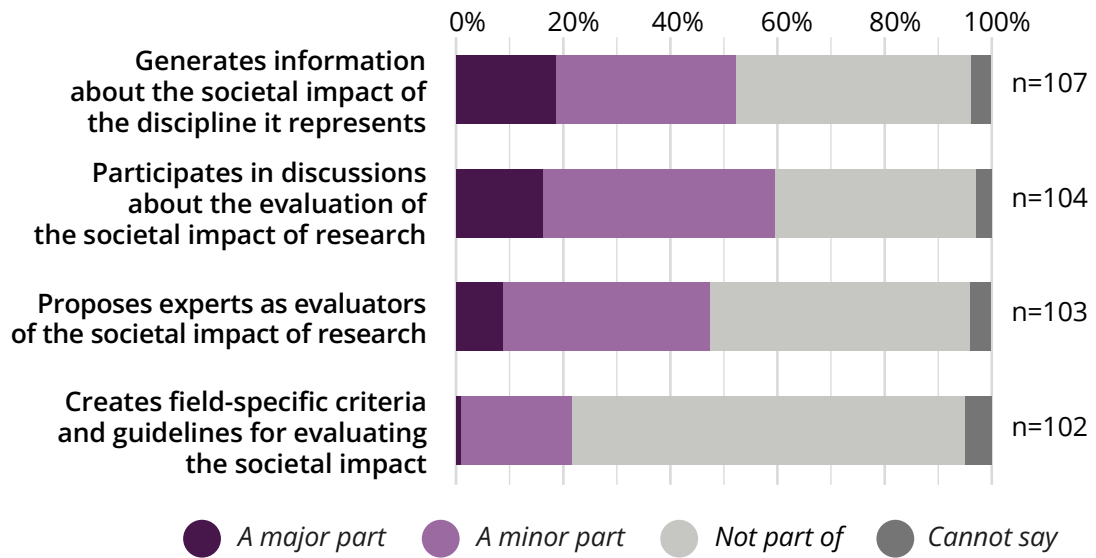
The survey's third theme of responsible research was about research evaluation. In connection to evaluating the scientific quality of research, the societies typically utilise peer reviewing with their publications (Figure 10). Two thirds feel that peer reviews are a main part of their society's operations. Less important, albeit practised by many of the societies, is rewarding research/researchers, proposing researchers to evaluate research and nominating researchers for awards. Rarer ways of participating in research evaluation include granting research funding based on peer reviews, providing consultation in research evaluation and creating field-specific evaluation criteria. One society stated in an open-ended answer that it provides training on research evaluation to research support service staff.



**Figure 10.** How pivotal are the following duties linked to research evaluation to your society's operations?

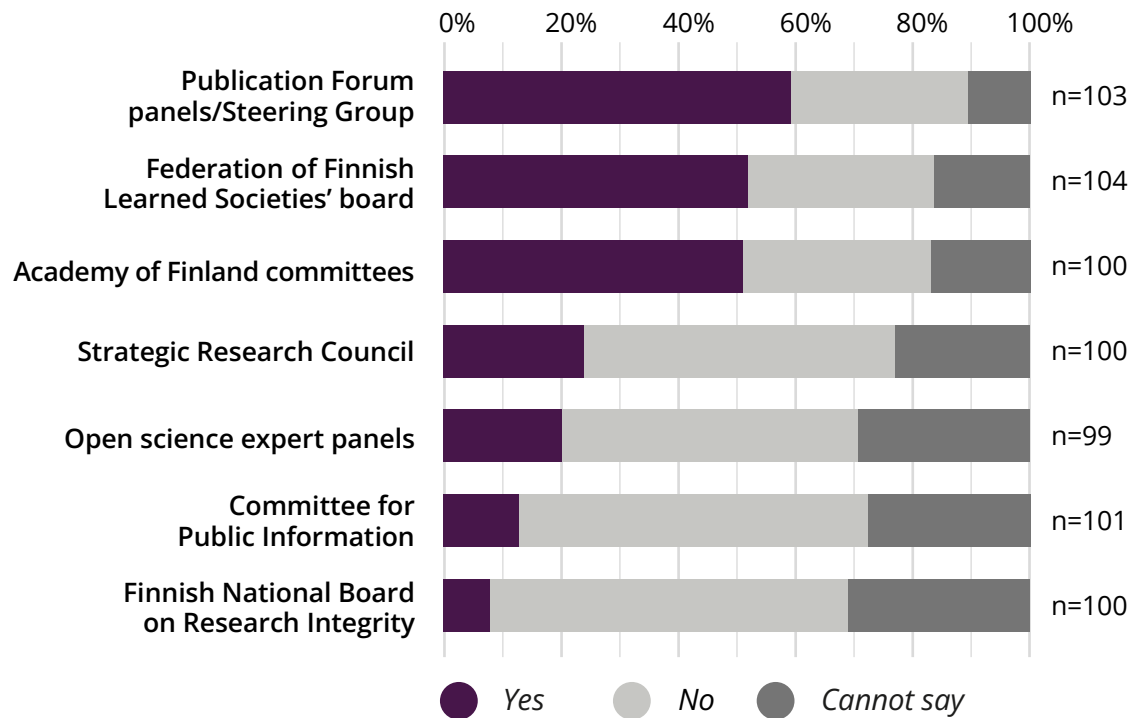
Evaluating the societal impact of research is still rarely a key part of the societies' operations (Figure 11). Most commonly, societies generate information about the societal impact of the discipline they represent and take part in discussions about the topic. Similarly, nearly half of the societies propose experts to evaluate the societal impact of research at least as a minor part of their operations. Roughly one fifth also create field-specific criteria and guidelines for evaluating societal impact. The open-ended answers showed differences in the societal impact of research between disciplines, and in some fields it is an integral part of research.

*"The study of history always has a social aspect to it and, to some extent, also a political one. That means that every study takes part in interpreting and understanding society and our history. Some research questions stir more emotions in the public than others, but our members assess critically the studies' veracity and arguments, as well as their findings."*



**Figure 11.** How pivotal are the following duties linked to the evaluation of societal impact to your society's operations?

Learned societies are asked to propose individuals to various types of expert panels, groups, boards and committees (Figure 12). More than half of the respondent societies propose experts to Publication Forum panels and the Steering Group, the board of the Federation of Finnish Learned Societies and the committees of the Academy of Finland. Around one fifth have proposed experts to the Strategic Research Council and open science expert panels. The open science expert panels are different in the sense that a membership does not require a proposal, and instead individuals may participate freely without a nomination by a society. Roughly one in ten societies have proposed members to the Committee for Public Information and the Finnish National Board on Research Integrity. In addition to this, societies may have representatives in discipline-specific bodies/committees that this survey did not cover. Nearly a third (29%) of the respondents had not proposed members to a single body of experts, while more than half had made proposals to one to three bodies. Additionally, three societies had proposed members to all seven bodies of experts that develop or promote science.



**Figure 12.** Has your society proposed or encouraged its members to join different bodies of experts that develop or promote science?

## 5.5 RESPONSIBLE RESEARCH DOCUMENTS SIGNED AND PROCESSED BY THE SOCIETIES

The respondents were asked whether their society had processed a number of responsible research documents (Figure 13). The most well-known of these documents was *the Policy for Open Access to Scholarly Publications* (Open Science Coordination in Finland, Federation of Finnish Learned Societies, 2019), published in 2019. The policy sets an objective to achieve open access to scientific articles and conference publications by 2022, which is why it is highly important for societies acting as scholarly publishers.

Another well-known policy by the Open Science Coordination was *the Declaration for Open Science and Research* (Open Science Coordination in Finland, Federation of Finnish Learned Societies, 2020a), in which a culture for open scholarship, open scholarly publishing, open research materials and open education were defined as the components of open science coordination. Open science is envisioned to be part of researchers' daily routines, enhancing the impact and quality of research. The Finnish scientific community is seen as a forerunner in open science, and this community, naturally, also includes learned societies. However, so far only five Federation member societies have signed the declaration, although 41 per cent of the societies that responded to the survey stated that they have discussed/commented on it, and therefore the document is more widely known than the number of signees would appear to indicate.

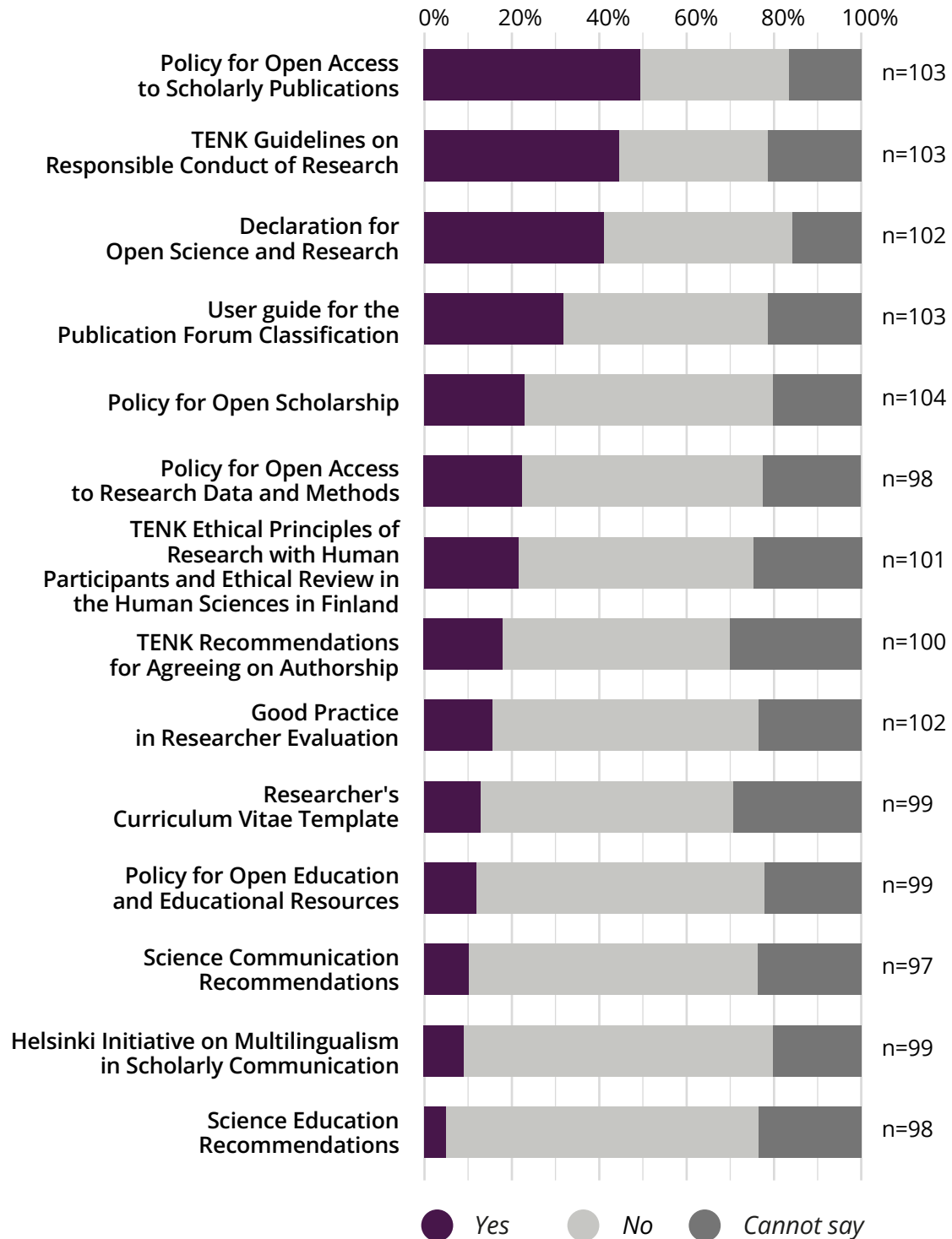


*The Policy for Open Scholarship* was open for feedback from the scientific community in late 2021, and it will be published in 2022. Approximately one fifth of the survey respondent societies stated that they had discussed/commented on this policy. Also, *the Policy for Open Access to Research Data and Methods* (Open Science Coordination in Finland, Federation of Finnish Learned Societies, 2021) had been discussed/commented on in one fifth of the societies that took part in the survey. *The National Policy for Open Education and Educational Resources* was thus far the least well known of the open science documents (Open Science Coordination in Finland, Federation of Finnish Learned Societies, 2020b). Approximately one in ten respondents had discussed it in their society.

Formulating a variety of guidelines and recommendations is also a key part of TENK's operations. Its document *Responsible Conduct of Research and Procedures for Handling Allegations of Misconduct in Finland* (The Finnish National Board on Research Integrity, 2012) had been discussed/commented on by close to half of the societies that took part in the survey. A scientific community can commit to following these guidelines by signing a form on TENK's website. Roughly a fifth of the societies had discussed *the Ethical Principles of Research with Human Participants and Ethical Review in the Human Sciences in Finland* (The Finnish National Board on Research Integrity, 2019a). Approximately 15 per cent of the respondents had discussed TENK's *Recommendations for Agreeing on Authorship* (The Finnish National Board on Research Integrity, 2019b) and *Researcher's Curriculum Vitae Template* (The Finnish National Board on Research Integrity, 2020).

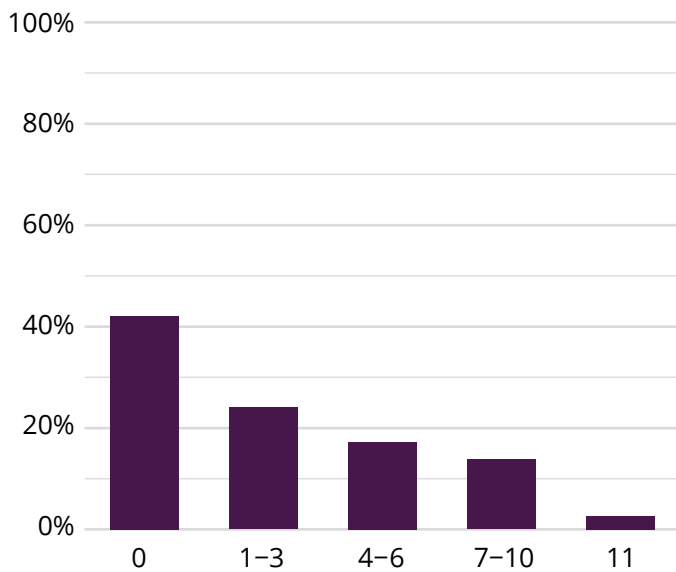
The Federation of Finnish Learned Societies has also created documents to steer research evaluation. *The User Guide for the Publication Forum Classification* (Publication Forum, Federation of Finnish Learned Societies, 2020) had been discussed in every third society that took part in the survey, and *the Good Practice in Researcher Evaluation* (Working group for responsible evaluation of a researcher, 2020) by 16 per cent.

The least well-known responsible research documents included *Helsinki Initiative on Multilingualism in Scholarly Communication* (2019), promoting multilingual science communication, which had been discussed by nine per cent of the societies. *Science Communication Recommendations* (Committee for Public Information, 2018) had been discussed by 10 societies and *Science Education Recommendations* (Committee for Public Information and Federation of Finnish Learned Societies, 2021) by just five.



**Figure 13.** Has your society discussed/commented on the following responsible research documents?

If we look at the number of documents that societies have discussed, we can see that over 40 per cent of the respondents had not discussed a single one (Figure 14) and none of the survey's societies had discussed all 14 of the listed responsible research documents. However, nearly 60 per cent of the respondents had discussed at least one of the documents, and approximately one in four had discussed up to three documents at their society. Moreover, three societies had discussed 11 documents.



**Figure 14.** The number of responsible research documents discussed by the learned societies. N=116

## 5.6 DEVELOPING THE SOCIETIES' OPERATIONS

The survey asked the societies to name the areas that they would like to increase their activities in going forward (Figure 15). The societies were most interested in proposing experts to working groups and committees, and as evaluators. In addition, most societies felt that recognising experts in their scientific field is an attractive duty. In fact, the expert network that the societies form should be actively used when searching for experts in science or a particular discipline for various roles. Over half of the societies were also interested in participating in the promotion of open science and organising events in the future.

Of duties linked to research evaluation, the societies found the participation in the evaluation of the scientific quality of research to be the most attracting one. One third of the societies were also interested in defining the scientific quality and societal impact of research, as well as assessing the societal impact of research. Roughly a third of the respondents showed interest towards duties connected to science education and the promotion of research integrity.

More than half of the respondents (57%) were interested in increasing their activities in 1-5 areas, while ten societies were interested in increasing their activities in all areas. However, approximately 16 per cent of the respondents did not pick a single future duty on the list.



**Figure 15.** *In the future, a society is interested in increasing its activities in the following areas. N=116*

## 5.7 THE EFFECTS OF THE PANDEMIC ON THE SOCIETIES' OPERATIONS

The pandemic that began in 2019 has had a significant impact on the way that society works, and this applied to learned societies as well. The most notable effects are linked to the societies' operating culture (Figure 16). The majority (93%) of the respondents stated that their society's operations had been either partially or completely transferred over to a virtual environment. The societies have also had to limit their activities, and nearly 80 per cent of the respondents said that their society has had to cancel planned events. A third of the respondents have cancelled society meetings, but more than half of the respondents said that the number of event participants has increased. On the other hand, roughly one in four stated that their number of participants has decreased.

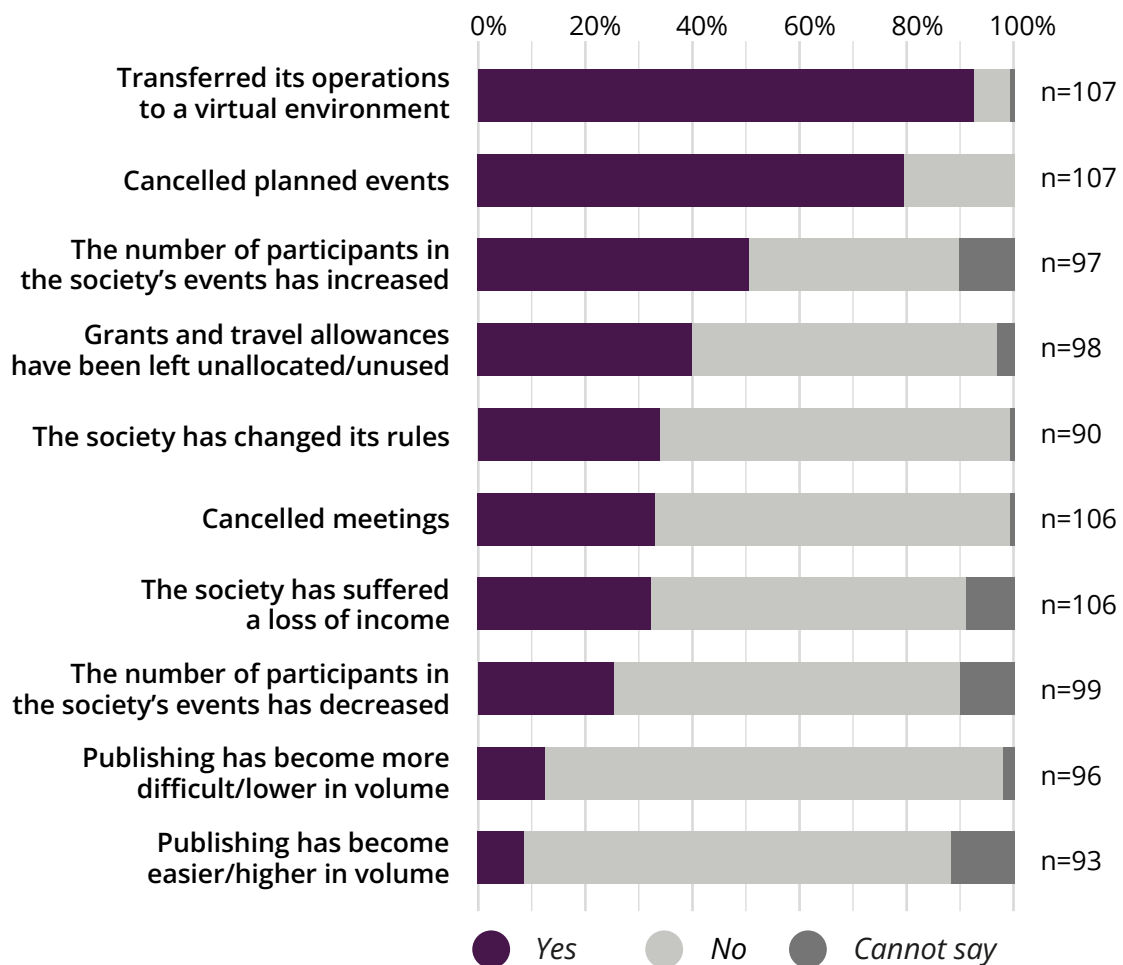
Some of the societies are awarding grants and travel allowances that have been unallocated during the pandemic to their members. Close to one third of the respondents reported loss of income during the pandemic, but the effects of the pandemic on publishing have been less severe.

The respondents were able to use the open-ended answers to explain in their own words how the pandemic has affected the operations of their society. Thanks to new ways of operating, the societies have become more skilled at arranging remote events. The societies have also been able to hold events online which would have otherwise been impossible to arrange. For example, some societies have invited foreign keynote speakers to their remote events. Virtual events have become a permanent part of some societies' operations, although some felt that remote events have reduced

the amount of dialogue during events and caused confusion in and disruptions to communication. Furthermore, in a few cases the number of members has dropped and the society's financial situation has deteriorated.

The respondents were also asked what form of support they would like from the Federation under these changed circumstances. The support needs included training, resources, facilities and support from the community. The societies would like training particularly in organising online and hybrid events. More generally, they would also like support with communications through social media, among other things. Resources and financial support would be welcome in publishing and event organisation, in particular, as long-term operations are impossible with donations and volunteer efforts alone. Furthermore, societies that are about to adopt open scholarly publishing will require financial support to make the change.

Facilities were one of the needs stated in the answers. Societies would like to use the House of Science and Letters, which is currently being renovated, as a meeting place, but they are also in need of a venue for streaming online events. Additionally, societies would like technical support with arranging hybrid events, and they were also interested in shared access licences to various online platforms. Generally, the respondents would like the Federation and the community of societies to provide encouragement and support in planning future activities.



**Figure 16.** How has the coronavirus pandemic affected your society's operations?

## 6. CONCLUSIONS

**THE PROMOTION OF SCIENTIFIC ACTIVITIES** and general scientific understanding are amongst the key objectives steering the operations of learned societies. The societies typically strive towards these objectives by holding scientific events and publishing scientific findings. In addition to that, the societies have several major and minor duties with which they promote science. Duties linked to societal impact and the promotion of professional activities are rarely a key part of learned societies' operations. Societal impact most commonly takes the form of public events and material published for a professional audience. Societies are enabling the societal impact of research through their own operations, for example by providing information about science to various audiences, facilitating cooperation between researchers and other operators, reacting to social phenomena and current events, and promoting social change, e.g. by taking part in the public debate. These are all mechanisms recognised in research that contribute to the societal impact (Muhonen, Benneworth and Olmos-Peñuela, 2020). However, the promotion of amateur activities, as well as work carried out with the officials and other similar activities, were significantly rarer in the learned societies.

When it comes to open science, duties linked to a culture for open scholarship and open scholarly publishing are key in learned societies. For example, societies operate in multiple languages and take an active part in the development of open science. And yet less than 10 per cent of the societies have discussed or signed the *Helsinki Initiative on Multilingualism in Scholarly Communication* (Helsinki Initiative on Multilingualism in Scholarly Communication, 2019). Instead, *the Declaration for Open Science and Research* (Open Science Coordination in Finland, Federation of Finnish Learned Societies, 2020a) and *the Policy for Open Access to Scholarly Publications* (Open Science Coordination in Finland, Federation of Finnish Learned Societies, 2019) have been discussed in the majority of the societies. Significant share of the societies have already moved to open access publishing, as 60 per cent of the survey respondents publish immediately available peer reviewed publications. According to the findings, nearly half of the societies have also determined a self-archiving policy for their publications, and ever since 2018, more than half of the societies have been allowing the self-archiving of their publications (Korkeamäki et al., 2019). Transformation of national scholarly journals to open access publications without author processing charges is a remarkable support for the development of national open science movement. Majority of the publishers already fulfill for example the requirements set in Plan S that has been signed for example by The Academy of Finland. Furthermore, Finland still lacks a funding model for domestically produced open scholarly publications, which is probably the reason that prevents some of the societies from adopting open access publishing.

Duties pertaining to open research materials and open education are rarer amongst the learned societies. Only a small number collects and stores research materials, and therefore in most societies open access to research materials is achieved through publishing, e.g. by determining the data policies for publications. Two thirds of the societies hold open training events at least as a minor part of their operations, but provision of open access to educational resources is rarer. Some societies also receive

income from arranging training (Korkeamäki et al., 2019), which may prevent open access to events or educational resources, among other things.

Activities connected to research integrity are typically not part of learned societies' operations, or they only constitute a small segment of the operations. These findings are in line with a report by Hastings et al. (2022), which studied the research integrity guidelines of societies operating in Europe. According to this study, roughly a third of the societies thought that providing field-specific guidelines was at least a minor part of their operations. However, the small sample size of the survey did not allow field-specific comparisons to be made to study this question further, even though the earlier study indicates that differences might have been found (Hastings et al., 2022). Some societies also hold discussions on research integrity. Only five societies reported incidents where responsible conduct of research has been violated during a society's operations. Similarly, the 2018 Research Integrity Barometer reported that, when asked, researchers rarely mentioned allegations of misconduct in terms of responsible conduct of research (Salminen and Pitkänen, 2019). However, it is possible that the number of allegations will rise in societies due to internationalisation, for example, as researchers trained and working in different countries may have differing understandings of what the responsible conduct of research entails. Furthermore, the pressure that researchers feel to secure funding, publish work and advance their careers may pose a threat to research (Salminen and Pitkänen, 2019). The number of misconduct allegations that reach TENK are on the rise, which also indicates that they are becoming more common in Finland. In fact, the most well-known of TENK's documents amongst the societies is its *Guidelines on Responsible Conduct of Research* (Finnish National Board on Research Integrity, 2012).

Based on the survey findings, the majority of the societies carry out activities connected to evaluating the scientific quality and societal impact of research. Duties connected to the evaluation of scientific quality are more often focal in comparison to the evaluation of societal impact. For example, societies that publish material commonly utilise peer review practices. Many societies also evaluate research and researchers in order to grant awards to researchers. Furthermore, societies have an important role in recognising experts and proposing them to various panels, committees and other bodies of experts. So far, societies have discussed documents on responsible evaluation (e.g. *Good Practice in Researcher Evaluation*, Committee for Public Information and Federation of Finnish Learned Societies, 2020) relatively rarely.

In the future, more than half of the societies intend to propose more expert members to working groups and as evaluators, for example. In addition to this, the societies generally see developing open science, organising events and recognising experts in a specific field as typical future duties. However, even though some societies are already actively working in many areas of open science, generally speaking the holistic promotion of responsible research has not yet become an established, key part of learned societies' operations. Going forward, these societies could have a more significant role particularly in the field-specific development of open science, research integrity and research evaluation in the fields they represent. The Federation's role is to support the societies in their responsible research activities by e.g. distributing information and facilitating collaboration between societies.

The coronavirus pandemic has changed many societies' operations at least temporarily, but in some cases the change has been permanent. The majority of the respondent societies have had to cancel planned events, while, on the other hand, some have shown resilience by swiftly moving their operations online. In fact, it is likely that the pandemic has accelerated digitalisation amongst the societies. However, it has had less of an effect on publishing. The pandemic has shown how important it is to be able to distribute scientific information quickly when necessary. Likewise, the importance of open research data has become increasingly obvious over the past two years (e.g. UNESCO, 2021). Therefore, learned societies have a significant role at a national level as publishers and distributors of up-to-date research data. In the future, societies would like support from the community in planning their operations. For this purpose, the Federation is designing joint events for its member societies. In addition to that, the Federation will begin improving its communication with its members in order to facilitate interaction between its member societies and staff increasingly well.

## ACKNOWLEDGEMENTS

**WE WANT TO THANK** the staff of TSV who participated on the design of the study. The questionnaire was developed together with the staff from The Committee for Public Information, Open science and research, and The Finnish National Board on Research Integrity. We thank also the Chair of the Board (TSV) Ulla-Maija Forsberg, Executive Director (TSV) Lea Ryyänen-Karjalainen and Head of Publications (TSV) Sami Syrjämäki for discussion and comments. We thank learned societies that participated in the piloting of the questionnaire. Thank you Reetta Muhonen and Tuulikki Alamettälä for your insightful comments. We thank Kaisa Kivipuro and Anne Haapanen for their valuable work for making the results public. Finally, many thanks also to the questionnaire respondents.



# REFERENCES

- Dingwall, Iphofen, R., Lewis, J., Oates, J., & Emmerich, N. (2017). Towards Common Principles for Social Science Research Ethics: A Discussion Document for the Academy of Social Sciences. In *Finding Common Ground: Consensus in Research Ethics Across the Social Sciences* (Vol. 1, pp. 111–123). Emerald Publishing Limited. <https://doi.org/10.1108/S2398-601820170000001010>
- The Finnish National Board on Research Integrity (2012). Responsible conduct of research and procedures for handling allegations of misconduct in Finland. Available at: [https://tenk.fi/sites/tenk.fi/files/HTK\\_ohje\\_2012.pdf](https://tenk.fi/sites/tenk.fi/files/HTK_ohje_2012.pdf)
- The Finnish National Board on Research Integrity (2020). Researcher's Curriculum Vitae Template. Recommendation of the Finnish National Board on Research Integrity TENK 2020. Available at: [https://tenk.fi/sites/default/files/2021-06/TENK\\_Tutkijan\\_ansioluettelomalli\\_2020.pdf](https://tenk.fi/sites/default/files/2021-06/TENK_Tutkijan_ansioluettelomalli_2020.pdf)
- The Finnish National Board on Research Integrity (2019a). Ihmiseen kohdistuvan tutkimuksen eettiset periaatteet ja ihmistieteiden eettinen ennakoarviointi Suomessa. Tutkimuseettisen neuvottelukunnan julkaisuja 3. Available at: [https://tenk.fi/sites/default/files/2021-01/Ihmistieteiden\\_eettisen\\_ennakoarvioinnin\\_ohje\\_2020.pdf](https://tenk.fi/sites/default/files/2021-01/Ihmistieteiden_eettisen_ennakoarvioinnin_ohje_2020.pdf)
- The Finnish National Board on Research Integrity (2019b). Agreeing on authorship. Recommendation for research publications. Publications of the Finnish National Board on Research Integrity TENK 6. Available at: [https://tenk.fi/sites/tenk.fi/files/TENK\\_suositus\\_tekijyys.pdf](https://tenk.fi/sites/tenk.fi/files/TENK_suositus_tekijyys.pdf)
- Forsström, P.-J., Lilja, E. & Ala-Mantila, M. (2019). Atlas of open science and research in Finland 2019: Evaluation of openness in the activities of higher education institutions, research institutes, research-funding organisations, Finnish academic and cultural institutes abroad and learned societies and academies. Final report. Publications of the Ministry of Education and Culture, Finland 2019:45. Available at: <http://urn.fi/URN:ISBN:978-952-263-689-8>
- Hastings, R. C., Labib, K., Lechner, I., Bouter, L., Widdershoven, G., & Evans, N. (2022). Guidance on research integrity provided by European discipline-specific learned societies: A scoping review. Available at: <https://osf.io/preprints/metaarxiv/kn5y9/>
- Heikkilä, H. (2002). Tieteelliset seurat, julkaisutoiminta ja tieteen popularisointi. In P. Tommila (ed.) Suomen tieteen historia 4: Tieteen ja tutkimuksen yleinen historia 1880-luvulta lähtien. Helsinki: WSOY, 564–601.
- Helsinki Initiative (2019). Helsinki Initiative on Multilingualism in Scholarly Communication. Helsinki: Federation of Finnish Learned Societies, Committee for Public Information, Finnish Association for Scholarly Publishing, Universities Norway & European Network for Research Evaluation in the Social Sciences and the Humanities, <https://doi.org/10.6084/m9.figshare.7887059>.
- Hewitt, M., Dingwall, R., & Turkmendag, I. (2017). More than research intermediaries: a descriptive study of the impact and value of learned societies in the UK social sciences. *Science and Public Policy*, 44(6), 775–788. <https://doi.org/10.1093/scipol/scx013>
- Hopkins, J. (2011). The role of learned societies in knowledge exchange and dissemination: the case of the Regional Studies Association, 1965–2005. *History of Education*, 40(2), 255–271. <https://doi.org/10.1080/0046760X.2010.518161>

- Korkeamäki, L., Late, E., Pölönen, J., Ryyänen-Karjalainen, L. & Syrjämäki, S. (2019). Learned societies in Finland 2018. Federation of Finnish learned societies, web publication 8. Available at: <https://doi.org/10.23847/isbn.9789525995190>
- Late, E., Korkeamäki, L., Pölönen, J., & Syrjämäki, S. (2020). The role of learned societies in national scholarly publishing. *Learned Publishing*, 33(1), 5–13. <https://doi.org/10.1002/leap.1270>
- Muhonen, R., Benneworth, P., & Olmos-Peñuela, J. (2020). From productive interactions to impact pathways: Understanding the key dimensions in developing SSH research societal impact. *Research Evaluation*, 29(1), 34–47. <https://doi.org/10.1093/reseval/rvz003>
- National open Science Coordination, Federation of Finnish Learned Societies (2021). Open research data and methods. National policy and executive plan by the higher education and research community for 2021–2025. Policy component 1: open access to research data. Responsible research series 7:2021. Available at: <https://doi.org/10.23847/isbn.9789525995466>
- Oancea, A. (2019). Research governance and the future (s) of research assessment. *Palgrave Communications*, 5(1), 1–12. <https://doi.org/10.1057/s41599-018-0213-6>
- Open Science Coordination in Finland, Federation of Finnish Learned Societies (2020a). Declaration for open science and Research (Finland) 2020–2025. Responsible Research Series 3:2020. The Committee for Public Information (TJNK) and Federation of Finnish Learned Societies (TSV). Available at: <https://doi.org/10.23847/isbn.9789525995237>
- Open Science Coordination in Finland, Federation of Finnish Learned Societies (2020b). Open education and educational resources. National policy and executive plan by the higher education and research community for 2021–2025. Policy component 1 – open access to educational resources. Responsible research series 16:2020 2nd volume. The Committee for Public Information (TJNK) and Federation of Finnish Learned Societies (TSV). Available at: <https://doi.org/10.23847/isbn.9789525995381>
- Open Science Coordination in Finland, Federation of Finnish Learned Societies (2019). Open access to scholarly publications. National policy and executive plan by the research community in Finland for 2020–2025 (1). Responsible Research Series 3:2019. The Committee for Public Information (TJNK) and Federation of Finnish Learned Societies (TSV). Available at: <https://doi.org/10.23847/isbn.9789525995329>
- Publication Forum, Federation of Finnish Learned Societies (2020). User guide for the Publication Forum classification 2019. Responsible Research Series 10:2020 2<sup>nd</sup> volume. The Committee for Public Information (TJNK) and Federation of Finnish Learned Societies (TSV). Available at: <https://julkaisufoorumi.fi/fi/kayttoohje>
- Ravn, T., & Sørensen, M. P. (2021). Exploring the Gray Area: Similarities and Differences in Questionable Research Practices (QRPs) Across Main Areas of Research. *Science and engineering ethics*, 27(4), 1–33. <https://doi.org/10.1007/s11948-021-00310-z>
- Salminen & Pitkänen (2020). Finnish Research Integrity Barometer 2018. Finnish National Board on Research Integrity TENK publications 2: 2020. Available at: [https://tenk.fi/sites/default/files/2020-12/Finnish\\_Research\\_Integrity\\_Barometer\\_2018.pdf](https://tenk.fi/sites/default/files/2020-12/Finnish_Research_Integrity_Barometer_2018.pdf)
- Sivertsen, G. (2016). Publication-based funding: The Norwegian model. In *Research assessment in the humanities* (pp. 79–90). Springer, Cham. Available at: <https://library.open.org/bitstream/>

[handle/20.500.12657/22952/1007208.pdf?sequence=1#page=90](https://doi.org/10.23847/isbn.9789525995428)

The Committee for Public Information and Federation of Finnish Learned Societies (2021). Tiedeosaaminen muuttaa maailmaa. Tiedekasvatuksen suositukset. Responsible research series 2:2021. Available at: <https://doi.org/10.23847/isbn.9789525995428>

The Committee for Public Information (2018). Viesti rohkeasti, vaikuta vastuullisesti. Tiedeviestinnän suositukset. Available at: <https://tjnk.fi/fi/tjnk/julkaisut/tiedeviestinnan-suositukset>

Unesco (2021). UNESCO Recommendation on Open Science. Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000379949.locale=en>

Working group for responsible evaluation of a researcher (2020). Good practice in researcher evaluation. Recommendation for the responsible evaluation of a researcher in Finland. Responsible Research Series 7:2020 2nd volume. The Committee for Public Information (TJNK) and Federation of Finnish Learned Societies (TSV). Available at: <https://doi.org/10.23847/isbn.9789525995268>

# APPENDIX 1: QUESTIONNAIRE

## RESPONSIBLE RESEARCH AND LEARNED SOCIETIES

Welcome to this survey!

Learned societies are key promoters of responsible research within the Finnish academic sector, but little information exists about their operations. With this study, we aim to make the learned societies' operations more transparent. The findings will help the Federation of Finnish Learned Societies promote the societies' activities and impact.

By responding to this survey, you can provide us with valuable information about the learned society you represent for the study. Every society's views are important. This questionnaire has been sent to all the members of the Federation of Finnish Learned Societies. Completing the survey takes about 15–20 minutes. Please respond to the survey by 30 November 2021.

The survey material will be kept confidential. The findings will be published in a way that prevents individual societies from being identified. The societies' names will not be made public. The survey material will be used in a report published as part of the Federation's online publication series. In addition to that, parts of the material may be made public in other publications. The anonymised survey material will be stored in the Finnish Social Science Data Archive (FSD) and its further use for research purposes will be allowed.

For enquiries about the survey, please contact researcher Elina Late, [elina.late@tsv.fi](mailto:elina.late@tsv.fi)

By providing your contact details at the end of the survey, you will take part in a competition to win one of five #minätutkin T-shirts. Taking part in the competition is optional.

### Background questions

**1. The name of the learned society I represent:**

Your answer:

**2. My main role in the society is:**

*Please select only one of the following:*

Chairperson

Secretary

Treasurer

Board member

Other

## Discipline

### 3. The society operates in the following disciplines:

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

Humanities

Engineering and technology

Natural sciences

Medicine and health sciences

Agriculture and forestry

Social sciences

Other

What other discipline does your society represent?

## Operational objective

### 4. The operational objective of the society is:

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

Promotion of scientific activities

Promotion of activities connected to education

Promotion of professional activities

Promotion of hobby activities

Promotion of general understanding of science

Promotion of societal impact

Managing an official (or similar) duty

Other

What other objectives does the society have?

Which official duties does it carry out?

## Promotion of scientific activities

### 5. How pivotal are the following duties linked to the promotion of scientific activities to your society's operations?

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

Scholarly publishing

Organising scientific seminars and conferences

Research (e.g. projects, gathering research material)

Funding research (e.g. grants, travel)

Providing training to researchers

Providing facilities, materials and equipment for research purposes

Supporting researchers (e.g. mentoring)

Rewarding researchers and research

Researchers advocacy (e.g. employment, wages)

Other

In what other ways is the society promoting scientific activities?

### Promotion of societal impact

#### 6. How pivotal are the following duties linked to societal impact to your society's operations?

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

- Publishing professional material
- Publishing popular material
- Participating in public discussion (e.g. statements made on behalf of the society)
- Organising professional events
- Organising public events/producing content
- Promoting business collaboration and commercialising research findings
- Citizen science (engaging professionals/citizens in research)
- Providing expertise/consultation (e.g. statements)
- Providing professional education
- Providing science education (e.g. to school groups)
- Organising hobby activities
- Professional advocacy
- Other
- In what other ways is the society promoting societal impact?

### Open science: a culture for open scholarship

#### 7. How pivotal are the following forms of a culture for open scholarship to your society's operations?

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

- The operations and finances are transparent
- The society has an expert/working group in charge of open science
- The operations are multilingual
- The society participates in the development of open science
- Other
- In what other ways does a culture for open scholarship feature in your society's operations?

### Open science: open materials

#### 8. How pivotal are the following duties linked to the promotion of scientific activities to your society's operations?

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

- Collects and/or stores research materials
- Provides open access to the materials or their metadata it collects and/or stores
- Maintains an open researcher infrastructure (e.g. data pool, database, equipment, equipment stock)
- Determines data policies to its publication(s), which define the principles pertaining to openness
- Provides training on how to make research materials openly accessible

Other

In what other ways do openly accessible materials feature in your society's operations?

### Open science: open education

#### 9. How pivotal are the following areas of open education to your society's operations?

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

Organises open educational events

Creates open educational resources

Encourages its members to create and use open educational resources

Provides training on how to make educational resources openly accessible

Other

In what other ways does open education feature in your society's operations?

### Open science: open scholarly publishing

#### 10. How pivotal are the following areas of open scholarly publishing to your society's operations?

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

Publishes open, immediately accessible peer-reviewed publications

Publishes open peer-reviewed publications with delayed access

Defines a self-archiving policy for its publications

Utilises open peer review in its publications

(e.g. open identities or statements)

Other

In what other ways does open scholarly publishing feature in your society's operations?

### Activities linked to research integrity

#### 11. How pivotal are duties linked to responsible conduct of research (RCR) or discipline-specific research integrity to your society's operations?

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

Provides training/guidance on responsible conduct of research (RCR) or discipline-specific research integrity.

Holds possibilities to discuss on these themes for its members

Develops or takes part in developing discipline-specific integrity guidelines that complement those of TENK

Other

What other activities linked to research integrity does your society have?

#### 12. Has your society appointed a research integrity support person?

*Please select only one of the following:*

Yes

No

Cannot say

Other

### Responsible conduct of research

#### 13. Has any misconduct occurred in your society's own activities in terms of responsible conduct of research or have any such allegations been made?

*Please select only one of the following:*

Yes

No

Cannot say

Other

What sort of misconduct or allegations have occurred and how has the society reacted to them (e.g. debates by the board/editorial committee of a journal, retraction of an article, expulsion from the society)?

### Evaluating the scientific quality of research

#### 14. How pivotal are the following duties linked to research evaluation to your society's operations?

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

Utilises peer review in its publications

Awards research grants based on peer review

Creates field-specific criteria for research evaluation

Proposes experts to evaluation panels (e.g. research evaluation, Publication Forum)

Proposes experts as research evaluators (e.g. projects, reports)

Provides consultation for research evaluation (e.g. universities, funders)

Rewards research/researchers

Nominates researchers for awards

Other

In what other ways does your society participate in evaluating the scientific quality of research?

### Evaluating the societal impact of research

#### 15. How pivotal are the following duties linked to the evaluation of societal impact to your society's operations?

*Please choose the most applicable option: A major part of the society's operations, A minor part of the society's operations, Not part of the society's operations, Cannot say*

Generates information about the societal impact of the discipline it represents

Creates field-specific criteria and guidelines for evaluating the societal impact

Proposes experts as evaluators of the societal impact of research

Participates in discussions about the evaluation of the societal impact of research

Other

In what other ways does your society participate in evaluating the societal impact of research?



### Participation in discussions about responsible research

#### 16. Has your society discussed/commented on the following responsible research documents?

*Please choose the most applicable option: Yes No Cannot say*

- Declaration for Open Science and Research
- Policy for Open Access to Scholarly Publications
- Policy for Open Scholarship
- Policy for Open Access to Research Data and Methods
- Policy for Open Education and Educational Resources
- TENK Guidelines on Responsible Conduct of Research
- TENK Ethical Principles of Research with Human Participants and Ethical Review in the Human Sciences in Finland
- TENK Recommendations for Agreeing on Authorship
- TENK Researcher's Curriculum Vitae Template
- Science Education Recommendations
- Science Communication Recommendations
- Helsinki Initiative on Multilingualism in Scholarly Communication
- Good Practice in Researcher Evaluation
- User guide for the Publication Forum Classification
- Other
- What other responsible research documents has your society discussed/commented on?

### Giving statements

#### 17. If your society gives statements or signs declarations/initiatives, how does the society discuss the statements?

*Please select only one of the following:*

- The chairperson decides on the statement independently
- The chairperson decides on the statement with the board or functionaries
- The society forms a working group to give a statement
- The statement is discussed with the members
- Cannot say
- The society does not give statements
- Other

### Participation in bodies of experts

#### 18. Has your society proposed or encouraged its members to join different bodies of experts that develop or promote science?

*Please choose the most applicable option: Yes No Cannot say*

- Open science expert panels
- Publication Forum panels/Steering Group
- Academy of Finland committees
- Strategic Research Council
- Federation of Finnish Learned Societies' board
- Committee for Public Information
- Finnish National Board on Research Integrity TENK
- Other

**19. In which open science expert panels do your society's members operate?**

*Please only answer this question if the following is true: You answered 'Yes' to question '32 [Q21]' (Has your society proposed or encouraged its members to join different bodies of experts that develop or promote science? (Open science expert panels)).*

*Please choose all applicable options:*

- Open access to publications
- Culture for open scholarship
- Open access to research materials
- Open education
- The society does not gather information about participation
- Other
- In which other bodies of experts that develop or promote science does your society operate?

**Future****20. In the future, your society is interested in increasing its activities in the following areas:**

*Please choose all applicable options:*

- Evaluating the scientific quality of research
- Evaluating the societal impact of research
- Determining the scientific quality and societal impact of research
- Recognising experts in the field
- Proposing experts in the field to working groups/committees/as evaluators
- Developing and promoting open science
- Determining discipline-specific research integrity guidelines and requirements
- Improving and carrying out science education
- Organising events

**21. If your society is interested in the duties mentioned above, may the Federation contact the society in the future?**

*Please select only one of the following:*

- Yes
- No
- Other

**Finally, a few questions about the effects of the coronavirus pandemic on your society's operations.****22. How has the coronavirus pandemic affected your society's operations?**

*Please choose the most applicable option: Yes No Cannot say*

- The society has cancelled planned events (conferences/seminars/training)
- The society has cancelled its meetings
- The society has transferred its operations completely/partially to a virtual environment
- The society has changed its rules (e.g. allowing remote meetings)
- The society's publishing work has become more difficult/lower in volume
- The society's publishing work has become easier/higher in volume
- The number of participants in the society's events has decreased

The number of participants in the society's events has increased  
Grants and travel allowances that the society normally awards  
have been left unallocated/unused  
The society has suffered a loss of income  
What other effects has the pandemic had on your society's operations?

**23. What sort of support does your society require  
in the changed circumstances?**

**Feedback and contact details**

**24. Here, you can elaborate your answers or provide feedback  
on the survey.**

If you would like to take part in the competition, please leave your contact details (email) so that we can contact the winners.

No contact details will be connected to the answers processed in this study, and they will be deleted immediately after the winners have been found.

Thank you for your response!

For enquiries about the survey and the reporting of the findings, please contact Elina Late ([elina.late@tsv.fi](mailto:elina.late@tsv.fi))



**Federation of Finnish  
Learned Societies**