

AUTHOR Reetta Muhonen, Laura Himanen and Janne Pölönen

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# Evaluation of Societal Impact of the Social Sciences and Humanities in Finland

Reetta Muhonen<sup>1</sup>, Laura Himanen<sup>2</sup> & Janne Pölönen<sup>3</sup>

<sup>1</sup> Senior Research Fellow, Tampere University, Finland, [reetta.muhonen@tuni.fi](mailto:reetta.muhonen@tuni.fi) ORCID: <https://orcid.org/0000-0002-4081-5269>

<sup>2</sup> Doctoral Researcher, Faculty of Management and Business, Tampere University, Finland, [laura.himanen@tuni.fi](mailto:laura.himanen@tuni.fi) ORCID: <https://orcid.org/0000-0001-8289-9766>

<sup>3</sup> Secretary General, Publication Forum, Federation of Finnish Learned Societies, Finland [janne.polonen@tsv.fi](mailto:janne.polonen@tsv.fi) ORCID: <https://orcid.org/0000-0003-1649-0879>

## Introduction

This chapter explores the question of how societal impact of research is evaluated in Finland. The main focus of the analysis will scrutinise how evaluation criteria and procedures take into account the characteristics of impact creation in the social sciences and humanities. As there is no national research evaluation protocol, societal impact is considered in different ways in various evaluation procedures, all of which influence the Finnish academics' work by creating steering effects. By breaking down these processes into levels - namely at a national, university, project, and researcher level - and identifying case study procedures for each, we reveal the ways in which societal impact evaluation works in Finland.

### 1. The National Level: Analysing the University funding model by the Ministry of Education and Culture

Many European countries have established performance-based funding systems for allocating core funding from the government to universities (Hicks, 2012; Zacharewicz et al., 2018). Compared to other countries, the funding of Finnish higher education institutions is exceptionally strongly based on measured outputs (European Commission, 2018; Kivistö et al., 2019). This funding model reflects the main purpose of the Ministry of Education and Culture's funding to secure basic higher education and research activities, which result in long-term impacts (Ministry of Education and Culture, 2011). Nevertheless, in Finland, the Ministry of Education and Culture allocates funding based on a broad range of indicators representing both research and educational activities, including societal impact activities (Sivertsen, 2017; Muhonen, 2018). The Ministry has also considered the addition of new indicators for monitoring and incentivising more diverse societal impact activities (Ministry of Education and Culture, 2015). While there is no shortage of possible indicators for societal interaction, the Ministry of Education and Culture recognises the challenges of the diversity of universities and fields, the cost of collecting data, the reliability of the data, as well as the possible incentive effects to be considered in such an evaluation exercise (Ministry of Education and Culture, 2015).

Therefore, the current funding model (see Table 1), which fixes indicators and their share of core funding from 2021–2025, promotes the vision aiming at higher quality, efficiency, and impact of the Finnish higher education system (Ministry of Education and Culture, 2018).

Table 1. The funding model of Finnish universities 2021–2025.

<b>Performance indicators</b>	<b>Share (%)</b>
Education	42
• Master’s and bachelors’ degrees	30
• Continuous learning	5
• Employment and quality of employment	4
• Student feedback	3
Research	34
• PhD degrees	8
• Scientific publications	14
• Competitive research funding	12
Education and science policy objectives	24
• Strategic development	15
• National duties	9

Table 1 shows that educational performance accounts for 42% of the basic funding, and within this area, most of the funding is based on the master’s and bachelors’ degrees: 30% of the annual core funding. The share of basic funding allocated based on research performance is smaller, 34% of the core funding than that of educational performance. In addition to the number of PhD degrees (8%), competitive research funding (12%) and scientific publications (14%) are used as research performance indicators. Measuring a university’s ability to obtain competitive research or corporate funding from international and national sources is seen to promote stronger business cooperation between universities, the formation of internationally attractive competence clusters, strengthening quality, effectiveness, and internationality of the research environment.

Scholars of SSH have paid specific attention to the criteria for “scientific publications” which represents 14% of core funding. This includes both peer-reviewed and non-peer-reviewed publication outputs in all languages and types and is based on publication data collected annually from the universities (Pölonen, 2018). Since 2015, monographs have a stronger weight than articles in journals, conferences, or edited works, which recognises the sustained intellectual efforts involved in some longer-term SSH research publications. Peer-reviewed outputs are also weighted according to the Publication Forum (JUFO) rating of publication channels. In JUFO, serials and book publishers are assigned by field-specific expert panels to one of four levels (1=basic, 2=leading, 3=top, 0=other). Peer-reviewed outputs in the JUFO level 0 channels have the same weight as non-peer-reviewed outputs, while peer-reviewed outputs in channels assigned to JUFO levels 1 to 3 have much stronger weighting.

The purpose of the JUFO rating is to enhance the scientific quality and impact of research, however, it also contributes to recognition of societal impact in the funding model by taking

peer-reviewed outputs in the national languages of Finnish and Swedish adequately into account (Pölönen et al., 2021). This attention to language diversity is vital, especially from the perspective of the social sciences and humanities, where book publications and languages other than English remain important (Engels et al., 2018; Kulczycki et al., 2020). The Ministry considers scientific publications also non-peer reviewed outputs, including those targeted at professional and general audiences, in the funding model for the specific purpose of bolstering “the social impact of publications” (Ministry of Education and Culture, 2014). Since 2021, open access publications have also been given an additional weight, which is expected to promote the renewal of teaching, learning, research and innovation, and the opening up of new pathways to societal impact (Ministry of Education and Culture, 2018).

Overall, the Ministry of Education and Culture’s funding model includes only limited indicators aimed at measuring interactions potentially enhancing impact beyond academia, such as continuous learning, quality of employment, or publications targeted to professional and general audiences. There is not an indicator that sees societal impact tied directly to funding. Instead, the model presumes that long-term impacts will principally flow from strong research and research-based education. It is also worth noting that an indicator-based funding system risks goal-displacement, in maximizing the measured performance while neglecting the activities not measured. There is also a one-size-fits-all approach here, which does not sufficiently recognise the differences between fields.

Although not all activities are measured, the Finnish model does include a considerable diversity of educational and research indicators, which does help to mitigate an overpowering influence of any single indicator. There is also an effort to balance the set of indicators between fields. For example, a recent Economic Policy Council report (Seuri & Vartiainen, 2018) found that, while one specific indicator might be advantageous to certain fields, the outcome of the model is surprisingly balanced across fields – including the SSH – when all indicators are viewed as a whole.

The main purpose of the Ministry’s funding model is not to evaluate research for learning and improvement but simply to allocate funding. There is no national framework for formative research assessment of institutions in Finland and, as a result, the funding model and its indicators play a relatively strong role in shaping the evaluation culture (Muhonen, 2018). The Ministry allocates a lump sum to the universities, which are expected to allocate funding internally based on their own strategies and goals (Himanen & Puuska, 2022). According to the analyses by Seuri and Vartiainen (2018), the national funding model also creates relatively strong incentives which influence the Finnish universities’ activities. In addition, recent studies (Wahlfors & Pölönen, 2018; Pekkola, Kivistö & Kujala, 2021) have found that the majority of Finnish universities use the Ministry’s funding model indicators in their internal funding and evaluation procedures, with a varying degree of modifications. Therefore, this demonstrates how national funding model incentives aimed at universities trickle down to the different levels of university actors and levels of research evaluation procedures (Aagaard, 2015; Woelert & McKenzie, 2018; Krog Lind, 2019).

## 2. The University Level: Research assessment within the institution

As established above, Finland belongs to the countries that have no national research evaluation framework. Instead, the Finnish University Act requires universities to regularly evaluate themselves (Universities Act, 2009), but they are free to decide on the content and procedures of evaluation themselves. Research assessments arranged at Finnish universities are not centrally coordinated, nor are they considered as unitary national-level procedures, such as the Research Excellence Framework (REF) in the UK, the Strategic Evaluation Protocol (SEP) in the Netherlands, or research evaluation in Norway. But such autonomy is a recent phenomenon; Finnish universities were subjected to direct central control up until the early 1990s (Liuhanen, 2008, p. 26). Independence of the management of Finnish universities became popular alongside the ideology of “steering by results”, which gained traction in Finland in the late-twentieth century. The idea of the systematic evaluation of universities was first presented in 1985 by the Ministry of Education (Liuhanen, 2008, p. 29). Although the idea of external assessment was supported by the ministry, the ministry argued that the responsibility of the evaluations should be on universities themselves (Rekilä, 1996, p. 86). By the end of the 1990s, university research evaluations became an essential part of the management of Finnish universities (Wang et al., 2014).

Through the change of the budget system from line item to lump-sum budgeting Finnish universities were responsible for decision-making concerning, for instance, the internal allocation of funding and the recruitment of professors. So, universities received more local decision-making power, but in parallel, they became more strongly steered through the development of performance-based core funding. Efficiency, effectiveness, and accountability – these were the new keywords of Finnish universities introduced in the era of management by results (Liuhanen, 2008, p. 26-28; Hölttä, 1995; Välimaa, 1999). This fits well into the international context, with the demands of being able to concretely demonstrate the use of value created (Nussbaum, 2012; Bulaitis, 2020; Muhonen et al., 2020) materializing around the introduction of the “impact agenda” and the proliferation of research evaluation exercises to measure the societal impacts of research. The “impact agenda” is familiar to Finnish academics who have witnessed several science policy efforts encouraging societal impact, in particular since the introduction of the Third Mission of universities into the Universities Act in 2005 (Niiniluoto 2015, p. 17).

Finnish universities conduct research assessments every five to six years and the unit of assessment can be anything from the entire institution to a field, to an administrative sub-unit, or a self-defined research community. The preferred method has been evaluation by field-specific expert panels informed with bibliometrics (Wang et al., 2014). Traditionally, universities’ research evaluations look at the scientific quality and impact of their research, but as societal impact of research has become more pronounced on the science policy agendas, in Finland and internationally, it has gained ground as an equal criterion for research evaluations.

To give an example, Himanen conducted a review of university-level research evaluations from 2014–2019, which covered seven out of 13 Finnish universities. The review assessed how research evaluation arrangements enable the evaluation of societal impact (Himanen,

2019). Analysing instructions and guidelines regarding the evaluation of societal impact which were provided to the units under assessment and the assessment panels, Himanen used a set of criteria based loosely on a review of literature on evaluating societal impact by Reale et al. (2018). Himanen found that, in general, descriptions of societal impact were at a very general level, possibly reflecting universities' challenges in formulating specific aims for societal impact. Units of assessment did not receive much support in showing societal impact, but for all evaluations, qualitative evidence of societal impact was required, and three evaluations also asked for quantitative evidence. Only two universities provided indicators with which to support units' claims of impact, and they were both technical universities. These findings support Alastalo et al.'s (2014) discussion of impact as being largely understood as economic profits and technological innovations: funding from companies, inventions, patents, spin-offs, and start-ups.

Himanen identifies that in less than half of the evaluations, case studies were included in the assessment material and for the most part, units of assessment were given instructions on how to complete them. However, only one university provided instructions for the assessment panel on how to assess the case studies. More university evaluations focused on results as evidence of societal impact, but processes were considered equally important in three institutions. The results were then weighed against the basic principles of responsible research evaluation (Hicks et al., 2015): is the evaluation based on high-quality processes that are informed by the highest quality of data? This brief review of the different approaches to university research evaluation suggests that the data often used for evaluating societal impact can be considered subjective, somewhat unreliable, and inconsistent between scientific fields. That said, there are also indications of high-quality processes, albeit being overly reliant on the unit of assessments' ability to prove societal impact as well as on the evaluation panels' capability and willingness to assess or even value societal impact.

To conclude this discussion of university-level research assessments, we note that approaches are usually conducted in a uniform manner through producing comparable evaluation material across scientific fields and using the same assessment criteria for all units under evaluation. Typically, research evaluation arrangements in Finnish universities enable the evaluation of societal impact, but there is a lack of scholarly consensus on what societal impact means. Therefore, evaluation of societal impact is still a somewhat artificial add-on next to the more established criteria of scientific quality and impact. For example, evaluation panels can consider the types and pathways of impact typical of their field, but they may regard impact assessment as secondary to their primary task of assessing scientific quality and impact of research. It is not yet the norm to include non-academics in the institutional assessment panels, let alone to establish separate panels specifically for the purpose of societal impact assessment.

The discussions around the challenges of evaluating societal impact can also easily boil down to secondary issues, such as the quality of data and availability of indicators for assessing impact or the relevance of the evaluation methods used. In other words, the evaluation itself and especially the quality of the evaluation becomes more important than the target of evaluation. There is a risk that this leads to the situation where tangible and

measurable outputs are favoured in evaluation processes, at the cost of conceptual impacts, which are more typical within SSH fields. The advantage of decentralised procedure is that each university can tailor the research assessment to its specific current needs. However, the disadvantage is the lack of comparability between universities and effort to develop national-level understanding and promotion of societal impact of Finnish research. The third level will allow for an exploration of where current state reforms around project-level evaluation is making new advances in how Finland engages with societal impact.

### **3. The Project Level: Strategic Research Council and impact evaluation**

One of the most profound recent reforms regarding societal impact in Finland has been the *Comprehensive Reform of the Research Institutes and Research Funding* (known as the TULA reform), which took place from 2014–2017. The core idea was to encourage societal impact of research. To reach that aim, the reform included the founding of the Strategic Research Council (SRC) under the Academy of Finland in 2014. Besides emphasizing high-quality research, SRC funds are particularly aimed at multidisciplinary projects that are expected to have significant societal impact. As a national-level organisation encouraging societally-relevant research, the SRC has made efforts to develop the ways of impact evaluation and, thus, SRC can be considered as one of the most influential actors shaping the current landscape of impact evaluation in Finland.

In addition to “strategic research funding” they included the funding mode for “Government’s analysis, assessment, and research activities” (VN TEAS) into the reform. The idea was that both these two funding models would serve societal needs, but with slightly different emphases: the SRC funding, with a longer time span, would leave room also for academic interests and, the Government’s VN TEAS funding instrument would serve policy needs (Haila et al., 2018).

The strong focus on societal impact in the SRC funding instrument is supported by the inclusion of non-academic experts in the review panels (see discussion in Luo et al., 2021), including the first stage of project evaluation based on letters of intent, as well as the second stage based on assessing full proposals. Two separate panels are constituted for the assessment of full proposals: a review panel for the societal relevance and impact, and a review panel for the scientific quality.

SRC-funded projects are organised under wider programmes. The very first funding call comprised four different thematic programmes: 1) Health, 2) Work, 3) Security, and 4) Urban, and includes topics such as urbanisation, prediction of security risks, new skills of employees, future occupations, welfare, lifestyles and mechanisms encouraging permanent changes in people’s behaviour (Strategic Research, n.d.). The initial SRC projects funded under these thematic programmes were launched in 2015 and the first 13 ended in 2019. What is of great interest to SSH research is that the disciplinary profile of these 13 projects is heavily based on social sciences including fields like sociology, political sciences, psychology, human geography, and education, while STEM fields are in a more minor position. Scholars have noted that whilst the social sciences are well-represented, the humanities are not. In these thirteen projects law is presented in two projects and history in one (Hjelt et al., 2021). Therefore, compared to the landscape of impact discourses a

decade ago (Alastalo et al., 2014), where the dominant way to understand research impact derived from the STEM fields, the SRC's impact funding model encourages the impact of social sciences research as the majority of the fields presented in the projects funded have presented social sciences (Hjelt et al., 2021).

Turning to a wider international and comparative context, the SRC's impact assessment methodology (Strategic Research, 2020; Westerlund & Barrett, 2020) is at least partially influenced by the UK REF impact case study methodology. Therefore, the remainder of the discussion of the project-level evaluation will compare the SRC model to the dominant actor in the European scope, the UK REF. There are several crucial differences between the methodologies used in the UK REF and SRC to evaluate impact: first, unlike the UK REF results, the SRC evaluation results are not used for the allocation of funding, but rather for developmental and monitoring purposes. In addition, SRC impact evaluations are ex-post evaluations concerning ongoing and ended projects, funded by SRC. Projects write 3–5 impact narratives and update them twice a year during the time they are active. Although evaluations are not used for allocation of funding, funding is conditional and subject to approval of the results of a mid-review (Westerlund & Barrett, 2020) Second, besides instructing to report the impact of their research, SRC researchers are asked about the next steps (Strategic Research, 2020). This approach distinguishes the Finnish SRC from the UK's REF methodology, where researchers are expected to report only existing impacts: “an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia” (REF2014, n.d.).

The SRC system also tackles what remains one of the most profound trials of the REF's methodology in terms of reporting impacts typical for SSH fields: the need for “sources to corroborate the impact” (REF2014, n.d.). This is a challenge as it is recognised how SSH research shapes society through diffuse processes, where research is absorbed over longer periods, through “knowledge creep” (Weiss, 1980). SSH research can lead to gradual changes in actors' ways of thinking, which may contribute to discursive shifts and, ultimately, more profound societal changes over time. The requirement that the links between research and impacts should be demonstrated through evidence becomes the core challenge in evaluating and measuring impacts (Penfield et al., 2014; Muhonen & Tellmann, 2022). Therefore, the third and the most profound difference between the UK's and Finland's impact evaluation methodologies is that whilst the SRC case study methodology is imitating REF instructions, it does not address the evidence requirement in a similar way to the REF methodology. Based on an earlier study on the challenges of reporting impacts (Martin, 2007; Muhonen & Tellmann, 2022), we consider this as a crucial difference regarding the characteristics of impacts SSH researchers can report. Muhonen & Tellmann (2022) demonstrate that sociologists solved the challenge of demonstrating impacts by reporting mostly instrumental impacts causing minor and direct changes, such as the creation of an indicator that is adopted in a policy document. In building causality and credibility into the cases, the ultimate challenge remained: in the case of conceptual impacts, like changes in thinking, typical for SSH fields, the nature of the effects themselves is often too vague to be captured concretely.

In assessing the instructions for reporting impact by SRC, we consider how impact evaluation in these projects is more SSH-friendly than the UK REF, by encouraging more realistic descriptions of the uses of research, giving space for researchers' reflections on the impact processes and interaction activities, and finally, in acknowledging the limitations of reporting impact. Spaces to feature "next steps" to the case studies and the absence of allocation of funding and claim for evidence to leave room for subjective and SSH-oriented reflections. It seems that the SRC impact platform could also allow researchers to acknowledge the limits of their work realistically, describing their research not as always being "ground-breaking", but rather building on existing knowledge and the work of other societal actors too. SRC projects are also asked to report the research outputs, but that is done in a separate form and thus, the link to the impact case studies is not as straightforward as in the UK REF criteria. Moreover, where the genre of VIP-testimonials, i.e., politicians, leaders and directors giving testimonials on the relevance of the case for them and the institutions they stand for, have gained relatively a big role in the UK REF impact case studies (Muhonen & Tellmann, 2022), we do not see this happening in the Finnish example. If SRC researchers were to demonstrate the sources to corroborate impacts, it can be expected that it would narrow down the spectrum of impacts reported by encouraging researchers to stick with reporting the instrumental, direct, and tangible ones (see Muhonen & Tellmann, 2022).

#### **4. Researcher-Level: Recommendations for responsible evaluation of a researcher in Finland**

The fourth and final level we will consider is the individual researcher. From the perspective of many Finnish academics, the effects of evaluation procedures considered so far can feel relatively distant: the Ministry's national funding model primarily affects the funding of institutions, not individuals; the institutional research assessments take place every 5–6 years and are typically focused on unit or group; a relatively small share of researchers apply for SRC funding and often do so as members of large consortia. For this reason, it is also important to take into consideration the rather ubiquitous evaluation procedures that directly affect the distribution of limited resources (positions and funding) of single researchers, such as evaluations for hiring, promotion, bonuses, and grants.

During the past decade, research communities, funders, and policymakers have grown increasingly dissatisfied with the narrow focus on peer-reviewed journal articles and related metrics, notably the Journal Impact Factor and H-Index, in academic evaluations of researchers for hiring, promotion and funding (O'Carroll et al., 2017; Saenen et al., 2019; Science Europe, 2020). The DORA declaration, the Leiden Manifesto on research metrics (Hicks et al., 2015), and the Metric Tide report (Wilsdon, 2015) paved the way for an increasing number of international statements and initiatives calling for responsible research assessment (RRA, see, e.g., Curry et al., 2020; Moher et al., 2020; Saenen et al., 2020; Mustajoki et al., 2021). The Academy of Finland, as well as eleven out of thirteen Finnish universities, have signed DORA.

To promote and facilitate the institutional change, research communities in three European countries – the Netherlands (VSNU, NFU, KNAW, NWO and ZonMw, 2019), Finland

(Working group for responsible evaluation of a researcher, 2020) and Norway (Universities Norway, 2021) – have produced national recommendations for responsible research assessments. The Finnish national recommendation provides a set of general principles – transparency, integrity, fairness, competence, and diversity – that apply throughout 13 recommended good practices to improve researcher evaluation. These best practices are organised into four aspects A.) Building the evaluation process, B.) Evaluation of research, C.) Diversity of activities, and D.) Researcher’s role in the evaluation process.

Section C on “Diversity of activities” includes recommendations specifically concerning the assessment of societal impact and interaction. The recommendation emphasises that “in addition to scientific quality, societal interaction and its impact are important qualitative attributes of research” (Working group for responsible evaluation of a researcher, 2020, p. 13). This echoes Gulbrandsen (2000) who identifies that the assessment of research quality should include solidity, originality, scholarly relevance, and practical utility. However, the 2020 recommendation also points out that qualitative and quantitative methods, data, and indicators for assessing societal interaction and impact are less well-established than those for the assessment of the scientific quality of the research, and that there are large differences between fields in the pathways to societal impacts and the types of impacts. Consequently, it is recommended that “the meaning of societal interaction and impact is carefully explained in the evaluation process. This explanation should cover what data and materials are used” (Working group for responsible evaluation of a researcher, 2020, p. 14). The report also recommends that researchers should be made aware of “how societal interaction and impact are weighted in relation to the quality of the research work and other work roles” considered in the assessment (Working group for responsible evaluation of a researcher, 2020, p. 7). This acknowledges that responsible research is also shaped by the processes of evaluation.

Such clarifications and research are important, and this national recommendation signals a strong move away from a narrow focus on peer-reviewed journal articles and related metrics, broadening the scope of assessment from research impact towards societal impact. There are clear attempts to address many of the challenges identified at other levels, above, in terms of subjectivity, scales of impact, as well as recognising the diversity of methods and approaches.

The implementation of the recommendations on responsible researcher assessment has only just begun. However, it is a promising start that both Academy of Finland and Universities Finland UNIFI have endorsed the recommendation for the responsible evaluation of Finnish researchers (Academy of Finland, 2020; Universities Finland, 2020). As pointed out by Mustajoki et al. (2021), one important obstacle for rewarding and recognising researchers for open science practices, including those promoting societal impact and interaction, is that evaluators lack reliable, comprehensive, well-structured, and comparable qualitative and quantitative data and metrics about most outputs and activities or academic work, other than publications. It is also an area of action in the national recommendation’s implementation plan that a sufficiently diverse research knowledge base should be developed at national level to support responsible evaluation of researchers at an

institutional level. Development of research information documenting the full range of outputs, activities, and engagements would help to shift the focus of evaluations from impact tracking to impact-enhancing interactions and structures.

## **5. The Public and Academic Discourse on the Value of Research in Finland**

According to the Finnish Science Barometer 2019, three-fourths of Finns showed great trust in Finnish universities (Finnish Science Barometer, 2019). The Barometer shows a relatively wide interest in research topics from different fields, including the social sciences and the humanities. However, the medical and natural sciences seem to be most highly regarded, and when asked to name the most important researchers, the Finns identify mainly experts from these fields.

At the same time, while Finnish science enjoys great trust from the general public, the academic community has also witnessed distrust and hostility towards science, particularly towards social sciences and humanities. One of the most recent examples of attacks against SSH happened in parallel with the threat of cuts to research funding in the autumn 2021 state budget. Along with the government's initial plan of cutting 40 million euros from research, there was a Twitter outburst against the funding decisions of the Academy of Finland for spending taxpayers' money on "useless" projects. It was started by a journalist criticising some research projects, financed by public money, as being not at all scientific. Soon others joined, with even a more aggressive tone (Thornton, 2021). These attacks targeted topics dealing with issues such as migration, mobility, freedom of speech, and gender. The attacked researchers were typical of SSH research in that the potential benefits of these projects were not obvious or concrete, nor did they materialise in the form of technical innovations or applications. Thus, besides blaming projects not being science, the primer for the hostile critics seemed to link also to the fact that the societal benefits of these projects were not evident to the layperson. Academics reacted to this by tweeting responses explaining the idea of scientific research, its role in society and the rigid evaluation procedures these projects had gone through. The explications did not help, rather more journalists and right-wing populists were motivated to tweet against those projects. (Thornton, 2021; Muhonen & Siekkinen 2021.)

However, after two Finnish scholars came up with the hashtag #minätutkin (translated as '#I research'), researchers started to explain their research topics in a simple way rather than to defend them against attacks. Suddenly there were thousands of positive tweets against the negative ones. The #minätutkin campaign was the most popular hashtag in Finland for four days in September 2021 (Thornton 2021). Unfortunately, attacks against SSH fields are not exceptional. It is not rare for academic work to be under threat of financial cuts either, instead, discussions of financial cuts on science could even be described as a regular discussion in the media. What was exceptional in this case was how actively and forcefully the academic community took part and stood for their own as well as their peers' right to free academic research.

The Third Mission was introduced into the Universities Act in the beginning of the 2000s. Since then, the Finnish impact landscape has changed considerably, raising challenges related to the autonomy of universities and in particular research. Tensions between

intrinsic and extrinsic aspirations in science are not a novel issue in academia, instead, the challenges on science-society interface have long existed at the heart of academic life. Nevertheless, what is characteristic to the current phase is the increase in academic practices aimed at encouraging impact. The practical implications of this are manifold and mostly seen on the level of academics' daily practises. They include requirements like integrating external stakeholders as partners in research projects, including detailed dissemination plans in research proposals and promoting and documenting the societal impact of research. This is seen also in how impact has found its way into the different levels of research evaluation – national, university, project and researcher – during the last two decades.

## **6. Conclusions: Looking to the future**

Based on our overview of societal impact evaluations across the four levels, it seems that the maturity of understanding the evaluation of the societal impact of research in Finland has developed but it is still at a relatively early stage. There is still a lot of diversity in terms of what is understood as societal impact and how it should be evaluated. This diversity is mainly based on what is considered as scientific research in the first place, as well as on what is typically considered as societal impact in either SSH or STEM fields. On the one hand, we find examples of efforts to compress societal impact into measurable indicators, and on the other, efforts to base the assessment of societal impact on the understanding of its complexity. Moreover, dispersion in the understandings of what constitutes societal impact, is based on the confusion on whether societal impact is about interaction activities or only “end products” of the processes. However, in the context of research evaluation practices, we see a positive development towards recognition of impacts as activities and effects deriving from different phases of research processes. And finally, it is evident that there is no “one size fits all” solution that is suitable for recognizing and evaluating societal impact in all kinds of evaluation processes, while as much context sensitivity as possible is needed if we want to evaluate societal impact in a fair and meaningful way.

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