

Promoting Responsible Research Practices

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1. Introduction

Fuelled by several highly visible cases of scientific misconduct, there is a growing awareness among researchers that the results of scientific research should be reliable, that research practices should be responsible, and that the workflows and results of research need to be transparent. While media coverage has mainly centred around large fraud cases, the research community has shifted attention from research misconduct towards other detrimental aspects that influence research results (Biagioli, Kenney, Martin, & Walsh, 2019). Experts in the field of research integrity are convinced that, on an aggregate level, factors such as detrimental research practices, lack of supervision and mentoring, hyper competition, an unhealthy research culture, and publication pressure are more threatening to the reliability and validity of research than (arguably rare) cases of misconduct (Begley & Ioannidis, 2015; Fanelli, Costas, & Lariviere, 2015; Martinson, Crain, De Vries, & Anderson, 2010). This has led to a shift in focus towards research on responsible research practices (RRP). In addition, the increased attention for the subject is reflected by the large number of (inter)national initiatives from various stakeholders to foster RRP. Interestingly these initiatives have mainly emerged from the biomedical sciences and psychology.

In the Netherlands, the debate on responsible research was predominantly fuelled by the high profile fraud case of Diederik Stapel. The investigation team that studied this case declared that this type of fraud is actually not common, but the case itself nevertheless triggered a plethora of Dutch initiatives to foster RRP (Abma, 2013). This included not only research on research integrity, but also a newly revised national code of conduct, and initiatives from funding agencies including ZonMw, establishing a funding programme called 'Bevorderen Verantwoorde Onderzoekspraktijken' or Fostering Responsible Research Practices (BVO). In this programme, several researchers are currently working on and assessing initiatives that foster RRP.

Research on RRP has shown several trends. Initial interest in this field was mainly in defining research integrity and gaining more insight in the different forms of research misbehaviours, leading to classifications of major and minor forms of misbehaviours (Falsification, Fabrication and Plagiarism (FFP) and Questionable Research Practices (QRPs) respectively; (Bouter, Tijdkink, Axelsen, Martinson, & ter Riet, 2016; Steneck, 2006). In addition, ample attention has been paid to estimating the frequency of transgressions and analysing individual cases (e.g. Fanelli, 2009; John, Loewenstein, & Prelec, 2012, van der Heyden, van de Ven, & Opthof, 2009). Over the past years, discussions and research interests have evolved to encompass a wider variety of topics.

Currently, studies are increasingly redirecting their focus towards root causes and possible solutions. This has resulted in a shift from micro-level analyses, mainly concerned with the individual culprit and his/her characteristics, towards current discussions acknowledging the important role of cultural, organisational, and systemic factors, including the research climate, organisational settings, and incentive structures (e.g., Haven, Tijdkink, Martinson, & Bouter, 2019; Martinson et al., 2010). This

shift is, among others, represented in the new [Dutch Code of Conduct for Research Integrity](#), dedicating a full section to institutional responsibilities (KNAW et al., 2018).

In addition, topics such as openness and transparency have been identified as drivers of RRP. Both nationally and internationally, a growing number of initiatives is calling for and facilitating increased transparency in research, voiced in terms like 'Open Science', 'FAIR Data' and 'Open Access'. Initiatives include proposals as diverse as calls for openly sharing data, facilitating reproducibility and replication studies, publishing in Open Access journal articles and using Open Peer Review formats (Nosek et al., 2015). Last, suspicion about published findings that are not replicable, mainly within psychology and the biomedical sciences, has directed research focus to ways of enhancing reproducibility, for example through studying publication bias, methodological flexibility, and transparency (Munafò et al., 2017; Wicherts, 2017).

While the number of initiatives aiming to foster RRP is growing and diversifying, the evidence base for what initiatives are actually successful is often lacking. In addition, initiatives are commonly restricted to specific niches or academic disciplines. Therefore, more research is still needed to guide the implementation of RRP across the full range of academic disciplines, cultures, and settings.

Our position paper tries to shed light on the (inter)national debate on RRP and emerged from a request from ZonMw to establish a document addressing three key issues:

1. A sketch of the current (inter)national discussion on RRP
2. An overview of current initiatives and already obtained results regarding RRP
3. An overview of potential future needs for research on RRP

This position paper will hence address these three points. We first discuss the methodology used to write this position paper. After the methodology section, we summarise the current state of research and provide a conceptual overview of initiatives to foster RRP, both nationally and internationally. Third, we identify the major gaps of knowledge in the field of research on RRP that may serve as a starting point for future research programmes under ZonMw. We do so by providing an overview in which we classify the most pressing themes that need further study. This knowledge will create a taxonomy of the most urgent underrepresented themes that a future funding programme could address.

2. Methodology

This position paper emerged from the close collaboration of its authors in multiple stages. During the process, the authors drew on their academic background, track record, and networks to establish an informed advice. Unavoidably, the voice of the individual authors, based on their academic background, has steered and shaped the discussion. Through various forms of wider consultation, we aimed to align our personal perspectives with those in the field of research on RRP and to solicit input from multiple stakeholders with their varying stances. At the end of this report, we present short biographies of the authors that will put their expertise into context and show the diversity in disciplinary backgrounds from the authors.

Step 1: Exploratory phase

After an initial round of discussion among the authors, each author individually provided an overview of current initiatives and underrepresented topics in the field of RRP. These overviews were inspired, but not restricted to, the personal background and knowledge of the authors, supplemented by discussion within their peer networks.

Step 2: Creating an overview of current initiatives across different academic disciplines

In a second stage, the independent overviews were combined and supplemented to form one set of current initiatives towards, and studies of, RRP, and discourse on such practices. Using an inductive coding approach, the initiatives were collaboratively clustered into a thematic map of current initiatives, showing networks, connections, and dependencies between the various themes. The results of this endeavour are presented in section 3 of this paper.

Step 3: Identifying underrepresented themes

In a third phase, the underrepresented topics identified by the individual authors in step 1, were combined to form a list of themes that we felt to be in need for further research. This list encompasses important gaps in knowledge on RRP that need more attention in a future funding program. This list was established through discussions on the scope of our project and the characteristics of the identified gaps, combining similar themes and deleting themes out of scope.

Step 4: Creating a ranking of underrepresented topics

Last, we created a ranked list of the underrepresented topics from step 3. This was done in a two-tier manner. Each author independently ranked the complete set of underrepresented themes through a short web-based survey. Each author was then asked to provide a brief justification for their prioritisation of the top five themes in need of further research. The authors argued which of the themes currently lack a robust evidence base and can be effectively addressed in a future funding program. After a collaborative discussion, the resulting rankings were subsequently merged into a single ranking based. The resulting ranking list of underrepresented research topics is presented in section 4 of this position paper.

Step 5: Writing a position paper on the results of steps 1-4.

Step 6: Consultation of first draft by approximately 10-15 experts in the field of RRP. See [Appendix I](#) for the full list of experts.

Step 7: Recommendations for future funding programmes on RRP

3. Current Initiatives Promoting Responsible Research Practices

The scientific community has already started many initiatives to promote and address responsible research practices. These initiatives cover all aspects of the scientific or 'empirical process' and are in differing stages of development and acceptance by researchers. In this section, we categorise the main types of initiatives and sketch the current state-of-the-art of RRP. A list of concrete examples of initiatives can be found in [Appendix II](#), whereby we acknowledge that the list is not exhaustive and may overlook other initiatives.

RRP effectively encompass the entire scientific ecosystem from overarching values to the implementation system to the research process. In Figure 1, we have framed responsible research practices as an overarching theme consisting of these three different levels: Scientific Values; the Scientific System; the Empirical Process.

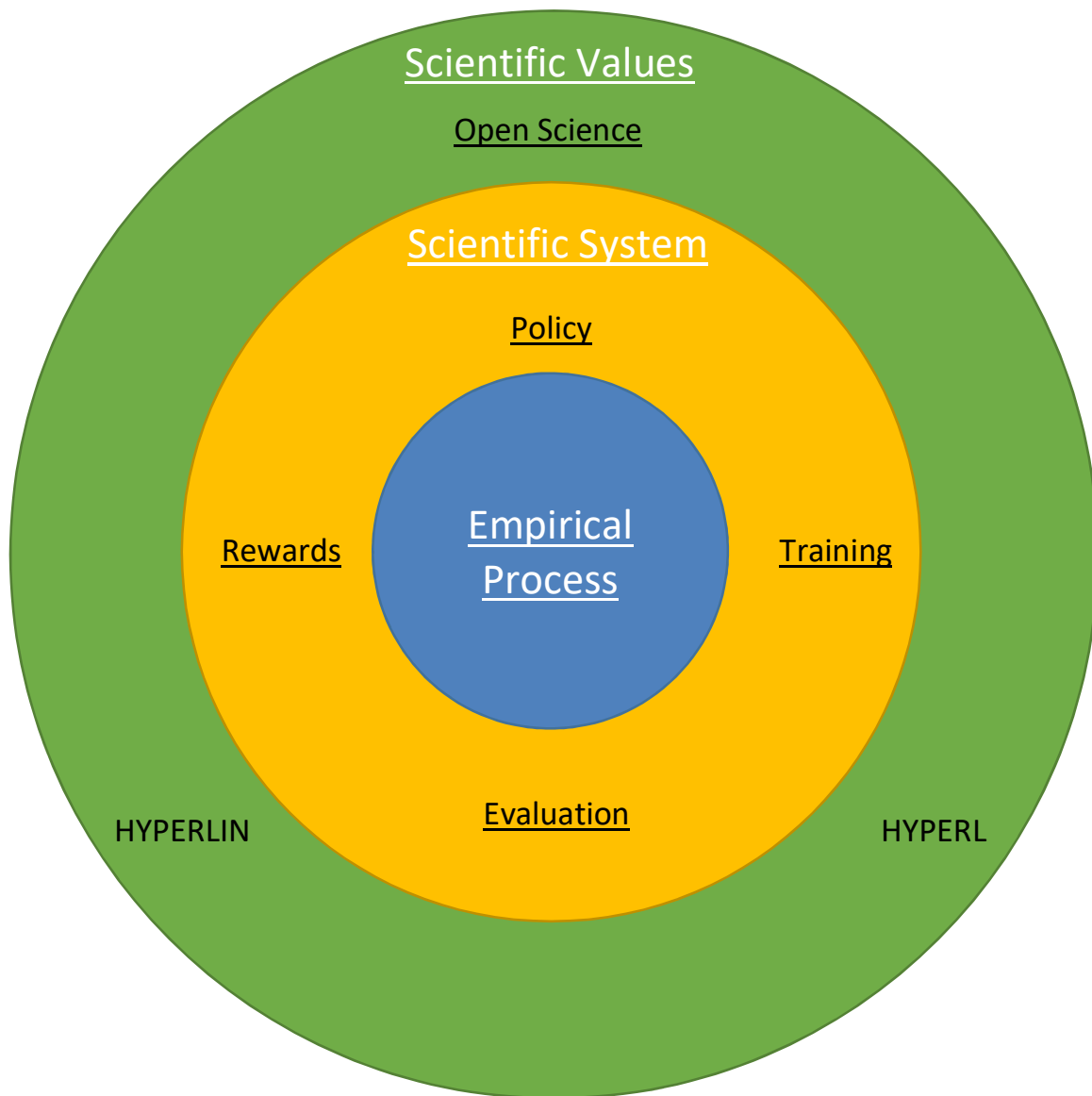


Figure 1. A schematic representation of the elements that interact in responsible research practices. The three elements all consist of initiatives that we have collected in [Appendix II](#). The three rings in this figure represent the different levels at which we can look at responsible research practices: Scientific Values, the Scientific System, and the Empirical Process. Each underlined term inside the rings are linked to a list of concrete initiatives in [Appendix II](#). Figure 2 elaborates on the initiatives to promote responsible research practices in the empirical process.

Scientific Values

The overarching first level of Scientific Values refers to three broad value frameworks under which all RRP are expected to be carried out and judged in the current socio-political climate: Open Science; Research Integrity; Societal Impact. These three frameworks are not to be seen as separate but rather overlap and feed into each other to varying degrees. Each framework consists of a multitude of practices, whereby researchers are expected to engage in some but not all practices in a given framework. We recognise hereby that more specific moral values such as honesty, scrupulousness, transparency, independence, responsibility, collegiality, and productivity (KNAW et al., 2018) fall under the category of scientific values and indeed play some role in each of our broader value frameworks, which we will briefly describe separately:

A modern interpretation of **Open Science** has been proposed by the European Commission (2016) as the opening up of research workflows and outcomes via digital technology. It consists of a variety of practices, of which Open Access to research publications and Open Data including data that is Findable, Accessible, Interoperable, and Reusable (FAIR) (Wilkinson et al 2016) are the most prominent, but also encompasses Open Education, Open Source software, and Citizen Science. The Netherlands has taken a leading role in Open Science with the [Amsterdam Call for Action on Open Science \(2016\)](#) and the [National Plan Open Science \(2017\)](#)

The concept of **research integrity** is crucial to the scientific endeavour and refers to research practices that follow four key principles of reliability, honesty, respect, and accountability ([ALLEA 2017](#)). Research misconduct arises from researchers intentionally or unintentionally not following these principles. High-profile cases of intentional misconduct often lead to public outcry and calls for change. Examples of research integrity initiatives in The Netherlands are the Netherlands Research Integrity Network (NRIN) and Embassy of Good Science.

Similarly, there has been considerable public indignation about the (lack of) **Societal Impact** of publicly funded research. It is argued that research activities and outcomes should not only involve citizens but also be relevant for and benefit society. This can take many forms: opening up and communicating about the outcomes of research; direct application and commercialisation of research technologies; directly involving the public in the design, collection, and analysis of research; or directly letting the public decide future research funding topics. The Netherlands among others aims to facilitate this through the so-called Knowledge Transfer Officers (KTOs) and Technology Transfer Offices (TTOs) and also through the participatory National Research Agenda.

The Scientific System

The secondary level of the Scientific System focuses on the steering and facilitation of RRP by governments, funding agencies, and academic institutions under four key areas: Policies for research; Training of researchers; Evaluation of research and researchers; Rewards for researchers. Each of these areas may focus on specific aspects of the scientific values as well as individual steps in the empirical process. The goal of the scientific system for RRP is naturally to ensure that researchers learn about RRP and conduct their research in a 'responsible' manner.

The **policies** for RRP relate to the legislation affecting research, funding programmes, guidelines and codes of conduct, and general principles for how researchers are to be trained, evaluated, and rewarded. The policies crucially determine the initiatives that are intended to foster RRP. Any identified gaps in initiatives should lead to new policies for stimulating initiatives to fill such gaps. The Netherlands has focused on RRP via the [BVO](#) programme by ZonMw and this position paper itself aims to identify any gaps for developing new policies.

The raising of awareness and **training** of researchers in RRP is crucial for RRP to be carried out successfully and be widely adopted by the scientific community. A recent survey by the European Commission (2017), however, has shown that the majority of researchers in Europe do not fully

understand and are not being supported to aspire the principles of Open Science. Initiatives for supporting and training researchers in RRP in The Netherlands are currently grassroots and locally organised such as the Open Science Communities.

The **evaluation** of research and researchers is perhaps the single most important factor in promoting RRP. The current evaluation system is focused on judging research, and by extension researchers, according to the number of publications that appear in high impact factor and branded journals. Researchers are to a much lesser extent, if at all, evaluated on the basis of other research-related activities such as teaching, supervision, grant applications, research designs, peer reviews, and the publishing of datasets. Examples of assessment initiatives are the [Declaration on Research Assessment \(DORA\)](#) and [Leiden Manifesto for Research Metrics](#).

The **rewarding** of researchers for RRP is lastly crucial for stimulating researchers to change their behaviour and commit to RRP. The rewards system is intrinsically linked to the evaluation system and thus any initiatives or changes in the one system will naturally influence the other. The Netherlands has recently proposed an [overhaul of the recognition and reward system](#) towards a differentiated and collaborative model to assess and reward other aspects of RRP.

The Empirical Process

Most of the initiatives to promote RRP are aimed at the empirical process itself. Figure 2 shows the many types of initiatives at this level, including how they link to the different steps in the empirical process and how they relate to each other. In many fields and types of research, the empirical process often roughly follows the same steps. From a theory (step 1), a hypothesis is formulated (step 2). To test this hypothesis, a study is designed (step 3) and data are collected (step 4). Based on the analysis of the data, a conclusion is drawn (step 5) and the research is disseminated (step 6). These steps are loosely based on the empirical cycle, as discussed by De Groot (1961). We realise that not every single scientific study will fit this representation (e.g. exploratory research where the data generates the hypothesis or conceptual research fields that do not employ data). However, most of the initiatives to promote RRP at the empirical level seem to fit within this framework. In the paragraphs below, we briefly outline the initiatives to promote RRP at each of these steps in the empirical process. Furthermore, for each step and each element we have collected a list of initiatives that fall under these elements. The full list is available in Appendix II.

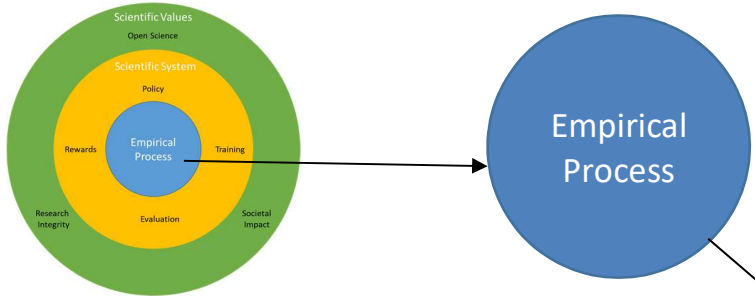
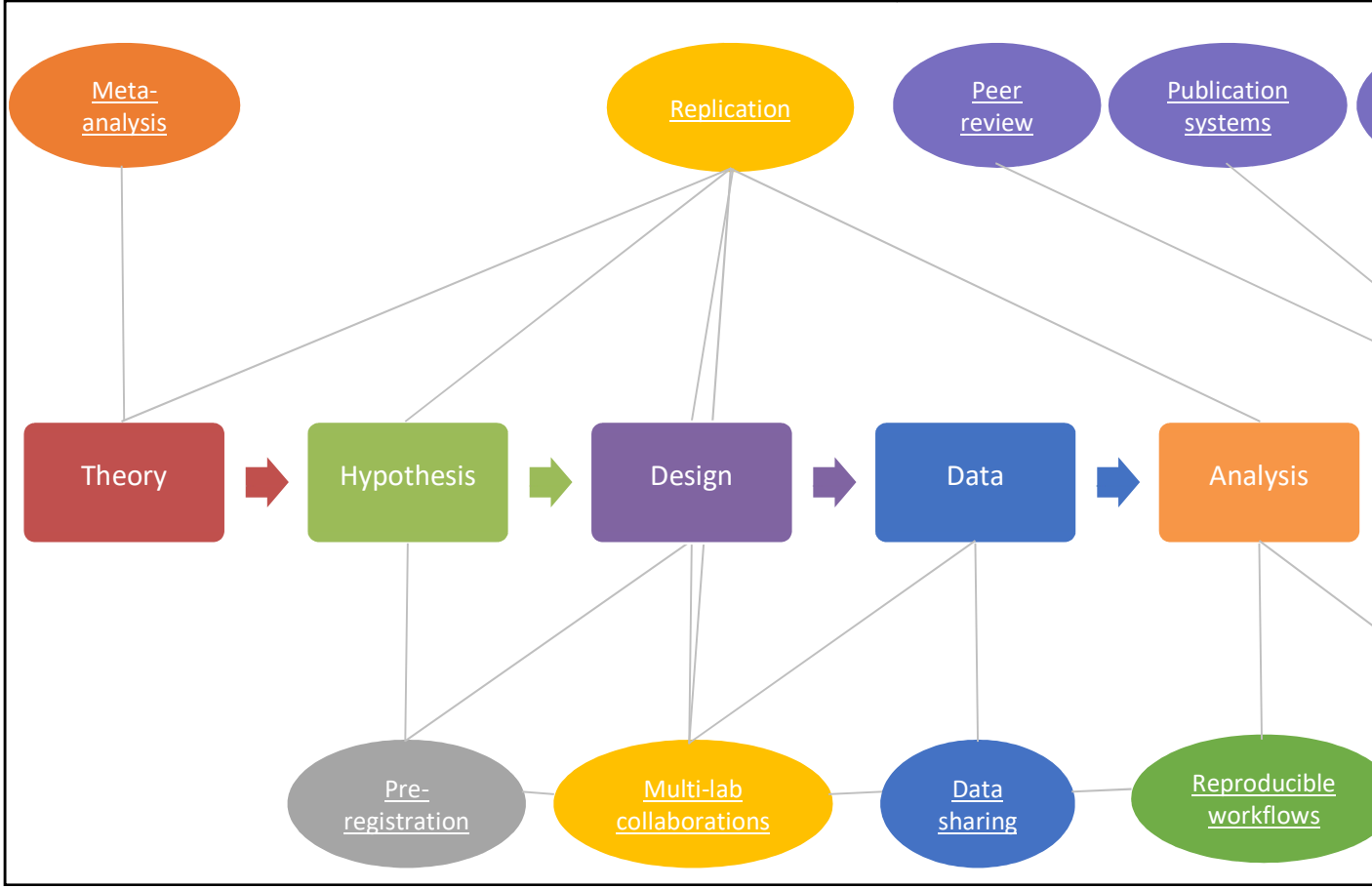


Figure 2. Schematic overview of the current initiatives to promote responsible research practices at the level of the empirical process. The initiatives (in the ellipses) are linked to different elements of the empirical process (rounded squares) and to each other with the grey connector



To build theory or to assess which effects are stable enough to build upon, research synthesis is an important step. One method to synthesise results is via **meta-analysis**: a statistical summary of different studies with (more or less) the same research question.¹ To promote RRP at this theoretical step, researchers have been developing advanced meta-analytical methods, such as statistical methods to detect and/or correct for (publication) bias in order to increase the accuracy of the estimates of the effect under investigation (see e.g., [p-uniform](#) and [p-curve](#)).

In the next step of the empirical process, a hypothesis is formulated. At this step, one of the most notable types of initiatives to increase RRP is **preregistration**. There are different ways to preregister a study, but generally, researchers publish their hypotheses and research plan online, before conducting the study. Preregistration can have several goals. First, it allows for a clear distinction between confirmatory and exploratory analyses (Wagenmakers, Wetzels, Borsboom, Maas, & Kievit, 2012). Second, it could prevent exploiting flexibility in methods and data analyses to obtain the desired result, because the plans were registered beforehand. Third, preregistration could decrease the effects of publication bias: even if a study was not published because the results were not significant, others can still find the preregistration and know that this study was performed. One relatively new form of preregistration is a 'Registered Report'. Here, the preregistration is submitted to a journal and peer reviewed. Once the preregistration is approved, the authors can get an 'in principle acceptance', meaning that if they follow their preregistration, their paper will be published regardless of the outcome. [Over 100 journals now accept this format](#).

The next phase in the empirical process is the study design phase. Two notable types of initiatives that promote RRP at this step are **multi-lab collaborations** and **replication studies**. Multi-lab collaborations are coordinated efforts to run the same study in different labs, sometimes across the world (see the [Psychological Science Accelerator](#) and the [Many Babies project](#)). This strategy increases statistical power and allows investigating generalisability of the findings. It also requires detailed study protocols, which likely increase reliability. A second initiative to improve RRP at the design step is a stronger focus on replication studies; running the same (or similar) study on a new sample to assess the reliability of previous findings. Replications affect the design phase, but they also link to many other steps in the empirical process; from theory to analysis, all the steps are more or less the same as the study that is replicated. An example of a Dutch initiative to promote replication studies is [the replication grant of NWO](#). A special case of a replication study is a '[registered replication report](#)': a multi-lab collaboration that performs a preregistered replication study. This combines the advantages of several initiatives to promote RRP during the empirical process.

Another clear point in the empirical process where RRP can be stimulated is when data has been collected. One of the most advocated strategies is to **share data**. Openly sharing data allows for reanalysis to detect and correct mistakes, to check robustness, and to answer new research questions. Several stakeholders (journals, funders, institutions) now require Open Data, and there is an increasing number of infrastructural solutions to facilitate data sharing. One crucial prerequisite for opening data, as noted earlier, is that the data is made FAIR (Findable, Accessible, Interoperable, and Reusable) ([FAIR principles](#)) (Wilkinson et al 2016). We note hereby that the concept of openness is not polar but a spectrum whereby the phrase 'as open as possible, as closed as necessary' generally applies.

In the analysis step of the empirical process, RRP are promoted via initiatives related to **statistical innovations** and **reproducible workflows**. Statistical innovations include rethinking thresholds for statistical significance, advanced analyses, and promoting statistical frameworks (frequentist vs. Bayesian statistics, effect size estimation, etc.). An example is the development of the free statistical software [JASP](#). Most of these innovations focus on increasing the reliability and robustness of statistical conclusions. Other initiatives focus on increasing reproducibility of workflows. A study is

¹ Researchers with a qualitative focus typically produce a systematic review involving the collection, critical appraisal, and synthesis of all relevant studies.

reproducible if reanalysing the data following the reported procedures leads to the same results. Among other things, reproducibility requires that data should be available, and procedures should be clear. An example of an initiative helping researchers make their workflow as reproducible as possible, e.g. the [Open Science Framework](#).

The final step of the empirical process is dissemination. In most cases, this entails publishing a study in a peer-reviewed journal. Many initiatives promoting RRP appear to focus on this step. Besides replication, **peer review** serves as a correction mechanism in science. Several initiatives focus on improving the quality of peer review, for instance, by publishing the reviews alongside the article (e.g., in the journal [Royal Society Open Science](#)). Other initiatives shift the focus to pre-publication peer reviews, by promoting **preprints**, published online in preprint [archives](#). Yet other initiatives aim to revise our publication system completely via innovative online platforms (e.g., the [megajournal F1000](#)). Finally, The Netherlands is working hard on promoting Open Access publishing through the funding mandates of [Plan S](#) that aim to provide full and immediate Open Access to scientific publications.

4. Themes that warrant future research

While the above list of current initiatives regarding RRP consists of laudable efforts and sketches a hopeful picture, much remains to be elucidated. Many of the initiatives described are relatively understudied and there remains a paucity of evidence on their effectiveness and potential impact. Few controlled studies have compared the differences between new initiatives with existing frameworks, as well as the potential hurdles and consequences of implementing the initiatives in different research settings.² In this section, we will outline some of the most prominent knowledge gaps that might be effectively addressed in a future funding program.

Following steps 3 and 4 described in the methodology section, we have created a set of underrepresented themes in the current research on RRP. Through a short ranking exercise, we have condensed this set into a list of six major themes that we believe lack a robust evidence base. Below you will find a summary of the most important themes. The full list of ranked themes can be found in [Appendix III](#).

First, we believe **the responsible assessment of research and researchers** is a crucially understudied issue. This was one of the main topics discussed during the 6th World Conference on Research Integrity (WCRI2019) in Hong Kong last June 2019 and is already a focus by ZonMw and NWO. The current evaluation criteria are thought to create a perverse incentive structure, are unidimensionally focused on ‘bean counting’, and may nudge researchers unconsciously into QRPs with a focus on publishing as many articles as possible, instead of getting it right. How these incentive structures actually influence research practices is still unknown and how the research assessment criteria should be reformed needs further research.

Second, we believe that **the influence of Open Science and transparency on RRP** requires further study. The Open Science movement is quickly adopting various initiatives that help to create a more open and transparent science (sharing data, pre-registering studies, in peer review and in publishing). Most researchers agree that Open Science benefits RRP. However, there is much misunderstanding on what ‘Open Science’ actually means and more research is needed to address possible benefits and disadvantages of this trend in the research community. Furthermore, we still are unable to determine if preregistration and sharing of data are reliable determinants that reduce publication and outcome reporting bias.

² However, we do note the rise of “meta-scientific” studies and even entire meta-research groups (e.g., <https://metaresearch.nl/>) that study exactly these questions.

Third, we identified a lack of knowledge on **research on responsible mentoring, supervision and role modelling**. Mentors and supervisors play a key role in establishing a responsible research climate for early-career researchers. As such, they have an enormous influence on the next generation and thus on the (future) practice of responsible research. Furthermore, most of the education in crucial phases of an academic career happens through socialization processes, largely influenced by mentors, supervisors, and role models. However, this pivotal role is not always fully acknowledged and it is seldom thoroughly reviewed in academic research settings. Also, knowledge on effective ways of performing this task is largely lacking. We believe that additional research may shed light on this, which might eventually assist in mentors and role models establishing a research culture that fosters RRP.

Fourth, **the effect of education/training on RRP** needs further study. The role of training and education is commonly proposed as one of the main interventions to foster RRP. However, the research on its effectiveness is inconclusive and small. Besides, hardly any educational programs are organized with a focus on responsible research in mid-career and senior researchers. Empirical research should assess what type of education/training is successful and describe what actually/potentially can make a difference.

Fifth, we felt that, although it has gained attention in the past decade, **checking for reproducibility** is another important focus for a future research programme. We feel that being able to follow clear methods, to have access to all relevant data and to use all materials used in the study is essential for a good reproducibility check. More research could detect possible factors that limit researchers to reflect on the reproducibility of their results and make people aware that reproducibility is one of the cornerstones of RRP.

Finally, we felt that **responsible and fair peer review** is currently understudied and does not receive sufficient attention in research funding programmes. Peer review is often considered one of the cornerstones of academic research and plays an important role in various forms of research evaluation, including journal review, career assessment and grant application. Currently, it is still largely a black box at risk of conflicts of interest, unfair procedures, serendipity and inconsistency. How can we improve peer review? What role can transparency play? Do we know enough about peer review to propose novel strategies/interventions that make peer review more reliable? Can responsible peer review reduce publication bias? What can automated software do to alleviate the enormous pressure on the peer review system? More research can detect potential flaws and can search for novel techniques that help us to improve the peer review process and make it more efficient and trustworthy.

For all these themes we believe that it is crucial to acknowledge the epistemic, methodological, gender and cultural **diversity** in science in order to comprehensively tackle issues of QRPs. To move away from one-size-fits all approaches to solving these issues, we need to better understand what RRP look like in different academic settings and what specific threats those settings impose on academics. For the themes mentioned above this means that training, mentoring, and supervision should be tailored to the specific needs of a certain community, allowing different approaches in different disciplines and different ranks. The same holds for all other themes mentioned.

Strengths and Limitations

As in all research, there are some strengths and limitations in our analysis. First of all, we believe that this position paper has the potential to inform ZonMw about potential gaps of knowledge in the field of RRP. One of the strengths is that our team consists of four early-career researchers who bring in a multidimensional perspective from their own disciplinary fields and expertise in RRP.

There is also a downside to the fact that the authors are all early career researchers; we might lack the experienced perspective of a researcher with more seniority. We have tried to limit this potential bias by inviting 10-15 more senior experts to comment on our paper (see [Appendix I](#) for our list of experts).

Furthermore, the field of research on RRP is steadily expanding. Therefore, it could well be that we may have missed some relevant initiatives and themes that merit further study.

5. Conclusion

In conclusion, we have tried to use different methods to gain insight in the initiatives that are currently being implemented in The Netherlands and in Europe to foster and study Responsible Research Practices (RRP). We have mapped these initiatives and subsequently identified gaps of knowledge or underrepresented themes in RRP. We have found several themes that we believe require further exploration in a potential next round of the project *Bevorderen Verantwoorde Onderzoekspraktijken* (the so-called BVO 2.0).

We have identified six main themes for further attention: research on responsible mentoring, supervision and role modelling; responsible assessment of researchers; the influence of transparency and open science on RRP; the effect of education/training of RRP; reproducibility research; and finally responsible and fair peer review.

These themes are in line with the gaps that we have determined in the mapping of the initiatives. Interestingly, we have found that the themes that we find underrepresented are broad areas of research that focus on the level of the scientific system. We have also found that there are already some initiatives that are currently gathering empirical evidence to start filling these gaps. However, we do feel that a future funding program should take these gaps into account to bring the field of research on research integrity a step further.

6. Biographies

Serge Horbach

Serge Horbach works as a PhD student at the Institute for Science in Society, Radboud University, and the Centre for Science and Technology Studies, Leiden University. His research focuses on research integrity and the scientific publication system, working in a sociology of science and science and technology studies tradition. Currently he studies how erroneous or fraudulent research may enter the scientific literature and how editorial and peer review practices may be organised to prevent this. Wider research interests include scientific (e)valuation practices and the impact of misidentified biospecimen on replicability.

Michèle Nuijten

Michèle Nuijten is an Assistant Professor in Methodology and Statistics at Tilburg University, where she is part of the Meta-Research Center. Michèle obtained her Bachelor's (2011) and Master's (2012) in Psychological Methods at the University of Amsterdam. In her PhD thesis (2018, Tilburg University), she focused on meta-scientific studies of problems and solutions in psychological science. Among other things, she co-developed the tool "statcheck": a spellchecker for statistics. Currently, her work focuses on reproducibility and replicability in psychology.

Gareth O'Neill

Gareth O'Neill is a doctoral candidate in linguistics at Leiden University and has represented early-career researchers as member of the University Council at Leiden University, board member of

Promovendi Netwerk Nederland (PNN), and president of the European Council of Doctoral Candidates and Junior Researchers (Eurodoc). He has been active in Open Science as contributor to the Dutch National Plan for Open Science (NPOS), expert on Open Science for the European Commission, and advisory board member for the FOSTER Plus project. He has also advised on research integrity for the PRINTEGER and EnTIRE projects.

Joeri Tijdink

Joeri Tijdink is an Assistant Professor at the metamedica department at Amsterdam UMC, location VUmc and philosophy department at VU University. He obtained his PhD in 2016 with the thesis entitled Publish & Perish; research on research and researchers. Currently he is involved in several research projects that investigate research integrity, publication pressure, research culture and responsible research practices and is the author of the self help guide: Scientist on the Sofa; how to survive at the university. He also works as a clinical psychiatrist.

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