Dilemma Game Professionalism and Integrity in Research
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## Dilemma overview

### Researcher Position

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### Research Strategy

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### Research Phase

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The visitor

A co-editor of the leading journal in my field approaches me as department chair to ask if he can become a part-time visiting professor. There is clearly possible synergy in various research projects, and in addition he mentions that he can ensure that a colleague from my department and I become editors of a special issue of the journal. What do I do?
Recently an article that I authored appeared in a Dutch-language journal. I realize there is an opportunity to submit the article to an English-language journal in my field. The content is still relevant and does not need to be changed. This is an efficient way of getting an extra publication. What do I do?
With a little help

I am on a tenure-track position, and my mid-term review is within a month. I really need to submit a manuscript before the deadline. Today in a group seminar, quite a few people were critical about the working paper I presented. After the seminar, a colleague tells me that he thinks that the chance of publication is much bigger if I let the area chair professor co-author the paper. The professor is well known in her field and is also close to the editors of the journal in question. What do I do?

**OPTION 3**

A. I am not going to invite the professor to co-author and submit the manuscript for publication.

B. I ask the professor if she is willing to be a second author and submit the paper when she agrees.

C. I postpone the publication to improve the quality of the paper. I do not ask the professor to co-author.

D. I postpone submitting the paper and plan to talk to the professor in a few weeks’ time. Then, I can hopefully list a working paper, also under her name, in my mid-term application file.
Stop the thief

At the printer, I find a draft article by one of my PhD students. I am not aware of the paper, and see the student only lists himself as author. The article contains important ideas of mine that I have discussed with him. When I ask him why he did not list me as co-author, he replies that he wants to write one article all by himself, and that I did not write anything on the subject. The latter is absolutely right, but without my help he would probably not have had the idea for the article to start with. What do I do?
Not so new after all

The paper I worked on very hard is nearly finished. Next week is the deadline of the special edition of a prestigious journal. My student assistant then shows me an article that looks very similar to mine. A model that I present as new in my article has apparently already been published. Luckily, it was published in a lesser-known journal. What do I do?

A. I pretend to have never read the article and do not mention it in my own article. I hope the reviewers of the journal don’t know the other article either.

B. At points in my article that overlap with the other article I refer to the other article, thereby risking my paper being rejected because of a lack of substantive contribution.

C. I refer to the other article to a very limited extent so my article appears to be original.

D. I drop the paper and focus on another project.
Mutual favours

A good colleague from my department makes me the following offer: If I make him co-author on my next article and he will do the same for me. We are both coming up for tenure soon, and my colleague has been particularly overloaded with teaching tasks. To the outside world, the co-authorships will not seem illogical, as we are doing research on similar topics. What do I do?

- I let him be a co-author on my article but I do not want to be co-author of his article.
- I accept the offer, on the condition that we both critically read each other's paper.
- I ask advice from my superior, who also happens to be the professor responsible for my colleague.
- I decline the offer and report the unethical behaviour to the head of our department.
First to the mill

Two of my PhD students are working on somewhat different but overlapping aspects of the same project. They share ideas and also partly use the same data. After a while Adam is finished with his paper while Eve is still working on her paper. In a seminar, Adam presents a paper without any acknowledgement of Eve. Upon reading the paper, Eve is enraged and claims that Adam committed plagiarism by using a critical idea of hers without acknowledgment. What do I do?

A) I tell Eve to let it go because she cannot prove anything.

B) I strongly urge Adam and Eve to co-author their papers since they are based on shared ideas and intense collaboration between them.

C) I tell Adam and Eve both to be more collaborative in the future as the success of the research project depends on this.

D) The collaboration clearly does not work. I separate the two and give Eve some good ideas for future research.
I am approached with the offer to ensure that a paper in a good journal is “ready for publication” and become co-author in return. Data analysis has already been done; the only things needed are a good positioning of the article and a good academic tone and style, which the other authors have difficulty with. The authors are known for their thorough data analysis. A review of the data by me would cost a considerable amount of time. Apart from this, I am not sure that I understand every detail of their analysis. What do I do?
Slicing and dicing

A well-respected colleague proudly explains how he has managed to get twelve publications with empirical analyses out of the one dataset he collected for his dissertation. This is a particularly interesting achievement, as it involves a dataset with only 232 respondents to a four-page survey. What do I do?

A. I think this is a great example to follow and I ask him how he has achieved this.
B. I cannot imagine each of these twelve papers has a unique contribution and vow never to go down this route.
C. I tell the colleague that this is bad science and that I strongly disapprove of his actions.
D. I think this is bad practice that is tainting the reputation of science and inform the editors of at least the most recent of the twelve publications.
I also submit the paper to the special issue of the other journal. If it gets a quick first round review, I can decide then which of the two journals has the best chance and I will retract it from one of the two review processes.

I also submit the paper to the special issue of the other journal. Chances are that the two manuscripts will develop in two different directions anyway with two different sets of reviewers.

I retract the paper from the first journal and submit to the second, knowing that as a result of the two rounds of reviews, the paper has improved a lot and stands a good chance of getting accepted.

I stick with the first journal until I get a final acceptance (or possibly a rejection).

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**Dilemma**

**Re-routing**

My paper has gone through two rounds of reviews with one particular journal and the reviewers are quite tough on me. But they do provide constructive comments and as they are not rejecting my paper, they probably do see some merit in my work. But now a call for a special issue has come in for another journal, exactly in the area of my paper. My paper will have a very good chance of getting accepted for the special issue, and the process might be much faster than the tedious process with these other, tough reviewers. What do I do?
So close

After a couple of rounds of reviews, I discover an error/omission in data analysis in a co-authored manuscript. At this point, the paper has almost been accepted, and the reviewers have never made any remark about the data analysis. I know that my co-authors do not want to miss out on the chance to publish. I was not the prime person responsible for this part of the data analysis. What do I do?

A. I leave the error/omission in the paper. If the reviewers have not noticed it, then it apparently is not a serious flaw.

B. I mention casually to the co-author responsible for this part of the data-analysis that there may be an error, but do not push for re-analysis when she doesn’t seem too bothered about it.

C. I tell all the co-authors that I cannot take responsibility for the current analysis and tell them to wait with submitting the final version of the manuscript until I have solved it. If they want to go ahead and submit it, I will have my name removed from the paper.

D. I inform the lead author of the suspected error, and leave the decision to her, knowing that she needs the publication for her tenure.
To perform or not to perform

One of the reviewers of my paper asks whether I can also relate my findings to performance data of the firms I have surveyed. I have collected performance data in my survey, but in the current paper, I have not included any performance data, because my analyses have shown that there are no statistically significant performance effects. How do I respond?

A. I say that I do not have any performance data. I include the idea of performance data as a suggestion for future research in my Limitations section.

B. I say that I have performance data, but as I do not have any hypotheses on performance in the paper, there is no need to include performance effects in the paper.

C. In a separate appendix for the reviewers only, I show my analyses of performance data and try to convince them that these non-significant effects do not add anything to the paper.

D. I add analyses of performance effects in the paper and include a discussion of these non-significant effects.
Sharing data

I am a junior researcher who has painstakingly hand-collected a large amount of data. My first paper using these data has just been accepted for publication. A senior colleague in my department contacts me to ask for the data. He has an important say in my career development. What do I do?

A. I send the senior colleague the data.

B. I tell the senior colleague that the data are available as soon as the last paper I want to write on the subject has been published. This can easily be one or two years.

C. I tell the senior colleague that I do not want to give him a preferential treatment.

D. I tell the senior colleague that I am willing to send the data on the condition that I will be mentioned as co-author on all publications that use the data.
Final checks

After years of hard work my paper is now at an advanced stage of the reviewing process with a leading journal. The referee has asked me to carry out a number of robustness checks. It turns out that my main result disappears in one of the robustness checks. This is also the check that I find irrelevant for the type of work I have performed. What do I do?

A. I simply report the robustness check, at the risk of having my paper rejected.

B. I point out that while my main result is not 100% robust, in empirical work a result that shows up in the vast majority of my analyses is still meaningful. In fact, with a 95% confidence level I would expect my result to disappear in 5% of the analyses.

C. I present the referee with a number of arguments to point out why this particular robustness check does not make sense.

D. I figure out that my main result remains intact with a slightly different interpretation of the robustness check and report that the test was successful.
Different results

As a first author I have recently submitted a paper to a reputable journal in my field. In the paper I use five different statistical methods to test my hypothesis. Three of these methods give significant results, whereas the other two do not. I can clearly explain these differences between the various methods in my paper. The associate editor emails that he only wants to publish the paper if the two methods that do not give significant results are removed from the paper. What action do I take?

A. I agree with the associate editor and remove the two methods.
B. I do not agree and email the associate editor asking him to reconsider.
C. I inform the editor-in-chief about the comments of the associate editor.
D. I cancel the submission and resubmit my paper to another journal.
The confidentiality of my respondents is paramount. I do not comply, and explain this in my response to the request.

I provide some access to the identity of my respondents, in such a way that they cannot be traced back to the observations in the data archive.

I provide full access to the identity of my respondents, but I request a signed confidentiality agreement of the person making the request.

I provide full access to the identity of my respondents. Showing data collection integrity supersedes respondents’ confidentiality.

Data check

My data is archived in a database, stored in the central data archives of the university. As part of a routine integrity check by the university, I am requested to provide information on my respondents to ensure that these are actual existing people, and that there is no fabricated data. How do I respond to the request?
Outliers

When screening my data, I find that there is one extreme observation. What do I do?

A

Nothing, it is part of my theoretical sample for a reason.

B

I look for information on the observation, trying to find qualitative reasons for the deviance. If there is a good explanation for its position, it must be a niche observation. Since it is a part of my theoretical sample, I leave it in. However, if there is no explanation for its position, I leave it out as it is there either due to measurement error or response bias.

C

I look for information on the observation, trying to find qualitative reasons for the deviance. If there is a good explanation for its position, it must be a niche observation. Despite my theoretical sampling, there is no place for such anomalous observations, so I leave it out. If there is no explanation for its position, I leave it in to avoid potential sampling bias.

D

I let a colleague review the data and follow her advice whatever it is.
No luck

I have run an experiment, but the results did not work out. I am disappointed because I had carefully designed all the manipulations and stimuli, and the previous experiment(s) that I ran for the same project had worked out. I am now writing the paper. What do I do?

**Option A**
I fully report the failed experiment as one of the main studies in the paper and speculate about the potential reasons behind the unsuccessful results in the discussion section.

**Option B**
I mention the unsuccessful experiment in one sentence and ask the interested readers to contact me for more details.

**Option C**
I do not mention the unsuccessful experiment anywhere.

**Option D**
I leave out the unsuccessful experiment from the paper, but mention it in the cover letter to the editor and suggest it can be included if so desired.
One additional experiment

My paper gets a revision decision from a reputable journal. The reviewers, however, want to see evidence of a specific process. In fact, they spell out a specific design for a potential study along with the results that they would like to see. I run the recommended experiment, but the results do not work out. What do I do?

A. I admit the failed attempt to the reviewers, and give reasons why the proposed experiment was inappropriate for the research.

B. I do not mention running the study to the reviewers, and neglect the issue in the revision notes.

C. I run the experiment again with some improvements in methodology hoping to find a positive result.

D. I carefully decline to run the experiment in the revision notes, as it will demand too much time and resources.
I follow the advice of the editor and rewrite the paper.

I send an email to the editor and explain why I think I should not do this.

I revise the paper, but explain in detail in the revision notes why I disagree with the editor’s recommendation.

I indicate to the editor that I will not resubmit the paper and submit it to another journal.

Rewrite

I receive a ‘revise and resubmit’ decision from a top tier journal. The editor, however, does not like the theoretical framework I used to derive my hypotheses. He suggests a different theoretical framework and asks me to completely re-write the introduction. As a result, my hypotheses would no longer be based on my a-priori assumptions, but on a different post-hoc explanation. How do I react?
In the paper and all the related documents (online supplementary materials) I only report X and do not mention that Y, Z, and T were measured. The paper looks very strong, with clear-cut results. In the paper, I mention that "extra analyses are reported in the online supplementary material", where I report the non-significant results. I expect that most readers (and referees) will not read the supplementary material.

In the paper, I explain all the possible dependent variables that I had, report all the results, and discuss the surprising non-significant effect. I have to suggest that the theory may be incomplete or only partially apply to my setting.

I do another experiment, hoping for different results.

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**Special effects**

I plan to run an experiment with two treatments A and B and study the treatment effects on subjects’ behaviour. I plan to use four different behavioural measures as possible dependent variables: X, Y, Z and T. In the pilot, all the variables are impacted by my treatments in the way my theory predicts. When I analyse the results of the final experiment, I find that only X behaves as my theory predicts, and the effect of the treatments on Y, Z, and T is reversed but not significant. What do I do?
Comply or complain

A PhD student of mine has submitted a manuscript, with myself and another colleague as co-authors. I have published in the journal before, and am a regular reviewer as well. After three months, the manuscript is desk-rejected by the Editor, with a very short argument, which is factually incorrect. The other colleague writes an email to the Editor, asking for further clarification but there is little response. What do I do?

A. I leave it at that, and discuss with the student and the colleague where to submit the paper next.

B. I contact the editor and demand a serious explanation; after all this is a serious journal, and certainly as a contributor to the journal I am entitled to serious attention.

C. I contact the Committee on Publishing Ethics (COPE), of which the journal is a member, to file an official complaint. The journal clearly has no sound procedure for handling rebuttals.

D. I leave it up to the PhD student. She is a senior student after all, and should learn how to handle such issues.
The bright side

We have agreed on external funding from a company to do research on the physical and psychological effects of certain light and sound effects. These effects are used in the design of some of their consumer products. The company representative makes clear he does not want to influence the results in any way. Before we start the project the only thing he would like to see is that we rephrase our research question. The rephrasing places the focus more on possible positive effects rather than on negative effects. What do I do?
Suspicions

A few students tell me that one of my colleagues has manipulated the results of one of the experiments in which they participated. They tell me a rather incoherent story and clearly have no deep methodological knowledge. After a casual talk with the colleague and a look at the results of the study I do not see any irregularities. The colleague is otherwise flawless and well-respected. What do I do?
Friendly reviewer

I am working as a PhD student and have almost finished my thesis. Within a few months I will start working at another institute on the same type of research. I have just submitted the last chapter of my dissertation to a journal. Yesterday, I received an email from my future boss in which he asks me to provide him with some review suggestions for my own paper. As it happens he is one of the reviewers. In this way, I am better prepared to respond to his review report and can increase the chance of acceptance. For both of us it will be good to have the manuscript accepted in a prestigious journal, as it will boost my career and increase the chances for getting grants together with my future boss. What do I do?

A
I tell my supervisor about the email and let it depend on him what to do.

B
It is very important for my career to get the article published, so I send an email with some suggestions to my future boss.

C
I thank my future boss for his help, but I tell him that I cannot accept the offer.

D
I contact the editor of the journal about the offer of the reviewer.
Informed consent

To alleviate the stress for children it is better to take an extra biopsy for scientific purposes during a regular biopsy that children undergo to confirm diagnosis. As researchers we are actually only interested in the biopsies in a few cases. A colleague suggests taking the research biopsy during the regular biopsy and telling the parents afterwards when we find that the biopsies are relevant for research purposes. Normally, it takes some time to explain the procedure and fill out the consent form beforehand. What do I do?
Put your supervisor first

As a dean I am attending a reception after the graduation ceremony of our master students. I am talking to one of the students who will continue on a PhD track at our school. She tells me that her future supervisor is mentioned as first author on an article she had written on the basis of her graduation project. The supervisor was hardly involved in the project but told her that it would improve her chances for the PhD position. She tells me this in confidence and just wants to know whether this is common practice at our school. What do I do?

A. I tell her that it was her decision at the time and she should just accept it.
B. I tell her that if she thinks her master thesis supervisor and future PhD supervisor was wrong she should report this to the integrity officer.
C. I immediately go the supervisor to make clear that this kind of behaviour is not tolerated at our school.
D. I tell her that I think her supervisor was wrong and that if there are more issues she can always come to me to discuss them.
Beneficial research

For my medical research I have to include at least 20 patients as participants. I have found very few participants so far. This is endangering the deadline we have agreed upon with our external sponsor. They might reconsider their support for our research project. We are not aware of any side-effects and are looking at the possible benefits. In my experience I know that if I emphasize the potential benefits and stress that there are no side-effects, more people will be willing to participate. What do I do?
Flexible scope

As a junior researcher I participated in the writing of an international research proposal which was approved. Now the principal investigator tells me that we will be changing the scope of the research. As a result half of the original research questions will not be answered. The professor tells me that one should be flexible in conducting research for which external funding is required. What do I do?

A. I tell the professor I will not accept the changes. If he does not agree with me, we will have to go our separate ways.

B. I understand his arguments and carry out the research.

C. I let my supervisor decide in the matter.

D. I make an official complaint about the professor to the dean.
Bothersome research

I participate in clinical research for which I need a lot of patients. Some of the patients are very ill and it becomes clear that they would prefer not to participate in the research at all. I respect this and conduct the research with less ill participants. After all there is a certain amount of stress involved without evidence of benefits. A couple of days later I receive an email from my professor in which he makes clear that I am behind schedule and should collect the data of ten new patients at least before the end of the week. This would mean that I have to include the very ill patients, despite their wish not to be included at all. Things are not going well in the contact with my professor because I failed to come up with any significant results in my last research project. What do I do?

A. I go back and thoroughly explain the importance of the research to the patients, asking them again to participate.
B. I explain the patients’ situation to the professor and emphasize that they do have the right to refuse to participate.
C. I ask the professor to extend the period of data collection, so that I have the time to search for other patients. I know he will not be pleased with the request.
D. I discuss the issue with the medical personnel. I ask them to ask the patients again.
Grounded conclusions

Today I had an appointment with one of the directors who funded the research I participated in. While discussing the draft report, it becomes clear that some of the results are not supportive of the director’s aims. He requests me to leave out some of the results. He also tells me that by helping him I can be sure of financial support in the future. Our institute depends for more than fifty per cent on this kind of external funding. What do I do?
Invalid data?

I am a PhD student and have just started with the analysis of my data. While analysing the data it becomes clear to me that something went wrong during the collection or the entry of the data since some scores are clearly incorrect. The organization that conducted the data entry is considering the possibility that something went wrong while entering the data. I do not have time to collect new data. What do I do?

A. I decide to correct the data myself; it is quite clear how to do this.

B. I decide to delete the observations with the incorrect scores and conduct my research with fewer observations than initially intended.

C. I discuss the issue with my supervisor and let him decide what to do.

D. I ask the company to correct the data and to admit in an official letter that they were responsible for the incorrect data entry.
Client and colleague

My department does a lot of funded research for a government agency. The manager who is responsible for the commissioning of research projects wants to do a PhD track within our department. He brings with him funding which is enough to let another researcher of our department participate. Our department has had a hard time financially in the past few years and the application is a very welcome opportunity. What do I do?

A. I send him an enthusiastic response and we approve the application.
B. I tell him we can only accept his application if he is no longer authorized to decide on research funding.
C. I decline the application since conflict of interest could occur which would endanger the quality and credibility of the research.
D. I let the director of the government agency decide on the matter.
Academic grudges

As part of my PhD I would like to write an article with a professor other than my supervisor. I think I can learn a lot from working with someone else and it is also preferable for my career to collaborate with different universities and publish in international journals. When I discuss the idea with my supervisor he lets me know that the professor in question is not suitable at all and that there is no need to collaborate with other universities. I know my supervisor personally dislikes the professor I would like to work with, but I am afraid that ignoring his opinion may influence the way he assesses my dissertation. Although a competent researcher, my supervisor is not a very accessible person who sometimes makes radical choices that I do not understand. What do I do?

Option 34

A. I refrain from writing an article with this particular professor.
B. I tell my supervisor why I think he does not want me to work with the professor. If he confirms my suspicion I refrain from writing the article.
C. I decide to write the article with the other professor but make sure that it is only published after my dissertation is approved and assessed.
D. I tell my supervisor that I don't want to be restrained by his personal feelings and will write the article.
Anonymous data

As a researcher I participate a lot in research projects funded by business. One of the explicitly stated wishes of the directors of a company is that anonymity of the persons interviewed is ensured as the research is on a sensitive issue. I have stated that the anonymity is ensured, but we have no written agreement. While writing the report and discussing the results it becomes clear that maintaining anonymity will make it impossible to verify the results. This can jeopardize the chances of the article being published. What do I do?

Dilemma overview

Dilemma grouped per content

Next / Previous Dilemma

35 DILEMMA

Anonymous data

A I respect the requested anonymity and leave it like that.

B I allow reviewers and other researchers access to my data.

C I ask the director to agree to limited anonymity. If he does not agree I will maintain full anonymity.

D I notify all participants about the use of their personal data.
Objective review?

I am approached to participate in a double blind review process. After reading the article I am fairly sure that one of my former colleagues is the author. I remember the colleague as someone who did not work very hard and profited a lot from others’ efforts. The paper is of average quality. I can raise a few fundamental questions which could lead to a rejection of the article. What do I do?
Sensitive results

A brilliant Master student approaches me to ask if he can write a PhD dissertation on whether and to which extent a specific oil company is contributing to the development of a particular country and respecting international and African human rights treaties. However, the oil company is a major funder of a lot of research in other schools at our university, representatives speak regularly at our university's prestigious events and, moreover, many alumni work for the company. I expect the research will not be very welcome to the executive board of our university and that I, as a supervisor, will be branded a troublemaker. What do I do?
I agree with the senior's point of view and only make some minor changes in the description of our methodology.

I ask my supervisor to convince the senior researcher that we have to make profound changes. If he does not succeed I go with the senior's point of view.

I make a plea for profound changes and if they are rejected by the senior researcher I refrain from co-authoring.

I make a plea for profound changes and if they are rejected by the senior researcher I acquiesce to the senior's point of view.

Senior methodology

As a PhD student I am co-authoring an article with an experienced senior researcher who is known as an expert on the topic. Our article has just been reviewed and one of the reviewers questions our methodology. We both know that there are some weak points in our methodology, but since only one of the reviewers mentions it the senior researcher argues that we do not have to make any profound changes for the article to be accepted. In an earlier discussion we had on the topic I agreed on following the methodology proposed by the senior even though I had my doubts. What do I do?
My PhD research is funded by a government organization. When discussing my conclusions with the organization, it becomes clear that my conclusions are much too nuanced to make any political statements. The organization asks me to rewrite my conclusions so that they offer more clear-cut statements. Based on the data I think it is impossible to say things with such certainty. When I discuss the matter with my supervisor he tells me that I need to learn to write for my audience and that I should be able to make bolder statements. I might need the government organization for financing future research. What do I do?

**Writing for your audience**

**A** I rewrite my conclusions in the way the organization asks me to.

**B** I refrain from rewriting my conclusions.

**C** I decide to write an executive summary in which my conclusions are more certain and clear while keeping the nuanced conclusion in my dissertation.

**D** I ask an older researcher who is very strict on scientific guidelines to decide on the matter.
Change for the good?

My main supervisor tells me, after reading a rough draft of my paper, that I drastically need to change my methodology. The approach I pursued was recommended by a famous, external member of my committee who will probably employ me as postdoc after I have defended my thesis. What do I do?

A. I inform the external committee member about the change.
B. I work out the paper with the changed methodology and send it to my supervisor and the external committee member for feedback.
C. I ask my supervisor to discuss the matter with the external committee member and let them decide.
D. I tell my supervisor that I consider the opinion of the external member of higher value. I adhere to my original methodology.
A close friend asks me to comment on his paper. While reading the paper I detect a great number of similarities with some recently published papers. The similarities do not constitute plagiarism in a literal sense, but are noticeable. When confronting my friend with my findings he seems unimpressed and submits his paper to an international journal without any profound changes. A couple of weeks later I receive the request from the journal to act as a referee on this particular paper. What do I do?

**Similar but not the same**

**I decline the invitation.**

**A** I accept the invitation but in my review do not mention the similarities I noticed before.

**B** I accept the invitation and report the similarities.

**C** I ask my friend what he wants me to do.

**D** I decline the invitation.
I am very happy to be invited to do contract research in the field in which I want to develop my expertise. My dean is prepared to allow me to do so but only on the condition that it results in a publication in a well-known international journal. The director tells me he expects affordable solutions that are supported by all the stakeholders. There are clear clashes between the director’s requirements and the scientific standards of international journals. What do I do?

**Science versus society**

A  I tell the dean that the research is less suited for publication. I accept the risk that I cannot do the research project.

B  I accept the contract without further comment. I choose the scientific approach which makes it likely that the article will be published, but will not generate the expected solutions.

C  I accept the contract without further comment. I choose the practical approach which makes it less likely that the article will be published, but will generate the expected solutions.

D  I tell the director that I cannot generate the results that suit him. I accept the chances that he will withdraw the contract.
One of my PhD students came to me yesterday to tell me that she had been accused of stealing data by writing a paper based on data she and two other PhD students had collected. After questioning her about the situation I find out that the data she used was collected by all three together in the context of another research paper that they co-authored. What do I do?

**Smart use of data**

I tell her that it is a smart move. She was the first to write the article so she can use the data.

I tell her that she should not write the article on her own and should apologize to her colleagues.

I tell her that the situation is one they have to resolve themselves.

I point her to the applicable code of conduct and I let her decide whether she can continue writing the article or not.
A leading senior researcher in my field of interest asks me to work on a project with him. He has already collected the data from fifty randomly-selected organizations and I am working on the analysis. After finalizing the paper together and submitting it, a reviewer points out that only thirty organizations meet our sample selection criteria. Making use of a smaller sample threatens the credibility and validity of the results. The senior researcher is not worried at all and tells me to simply change the sample selection criteria so that they are easily met by all fifty organizations. What do I do?

**Flexible criteria**

I accept the change in the sample criteria as proposed by the senior researcher.

I refrain from changing the sample criteria and withdraw my name from the paper.

I make sure that the article mentions that the co-author is responsible for the data and methodology.

I perform an additional survey to come up with 20 new companies that meet our criteria. That will take a significant amount of time and delay the project for a few months.
Enticing application

I am applying for a grant to fund my research on a very specific, scientific subject. One of my colleagues is known for being very good at writing convincing applications. I ask him for help, as I really need the grant. He is very willing to offer me a hand and rewrites my application. When reading his changes I get the feeling that it is too ‘enticing’ and that it promises more than I will actually be able to deliver. However, I have to admit that the application is really impressive and convincing. The deadline for handing in the application is tomorrow, what do I do?

A. I compliment my colleague and submit the application the way it is.
B. I decide to rewrite the application so that it is more realistic and less ‘enticing’ even though I have to work through the night and it may decrease my chances of getting the grant.
C. I use my original draft and tell my colleague that his conduct is unacceptable.
D. I ask other colleague to read the application and let it depend on her opinion.
I decide not to publish the paper before I have done all extensive checks.

I decide to submit the paper to a less prestigious journal to be certain it will be published.

I check my data and analysis more cursorily, so that I can still submit my paper in time.

I ask my supervisor to read my paper and if he has no profound comments I submit it.

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Single check

I am in a tenure track position and the tenure decision will depend on the number and quality of my publications. I have almost finished a paper and know that I should take some more time to double check the data and analysis. However it is of crucial importance for the tenure decision to get the paper published as soon as possible. What do I do?

A: I decide not to publish the paper before I have done all extensive checks.

B: I decide to submit the paper to a less prestigious journal to be certain it will be published.

C: I check my data and analysis more cursorily, so that I can still submit my paper in time.

D: I ask my supervisor to read my paper and if he has no profound comments I submit it.
Receiving a favour

I have been working on an idea for a paper with my supervisor. My supervisor suggests that I refrain from reporting that we worked on the idea together, for that will increase my chances of getting a good job. He also states that I can always return the favour at a later date. What do I do?
Self-correction

As a researcher I published a new article in a highly prestigious international journal. The article was praised for its thoroughness and scientific breakthrough. While working on an ensuing paper, I realize that I made a mistake in the analysis of the previous paper which has a high impact on the results. What do I do?

A I do nothing.
B I write a correction note paper and send it to the journal.
C I use my current paper to remedy the mistake, but in such a way that no one will notice the mistake in the first paper.
D I discuss the issue with one of my supervisors and follow her advice.
Controlling my variables

I am a researcher in a tenure-track position and really need an additional paper to be published. The main hypothesis in the paper I am working on is that A influences B. During the research I used multiple variables for control purposes. During the analysis it becomes clear that there is no impact of A on B unless I remove one of the control variables. What do I do?

A. I remove the variable and do not mention it in my paper.
B. I remove the variable and look for scientific arguments for doing so and mention it in the paper.
C. I submit my paper without removing the variable even though it might mean that my paper will not be published.
D. I ask a peer what she would do. I follow her opinion.
Different estimates

I am a PhD student. I have just run a regression analysis and the results come out nicely. To validate the results I decide to run two alternative estimation procedures. However, it turns out that the results from the alternative tests are not significantly different from zero, although the point estimates are comparable to the first results. What do I do?

- **A** I only report the results of the first regression analysis.
- **B** I report all results in order to show the robustness of my results.
- **C** I do not report the results but mention in the paper that these strategies yield quantitatively similar conclusions.
- **D** In my discussion I list a number of reasons why performing these additional analyses would be inappropriate.
Results with impact

As a researcher I have just finished a project on criminal activity in the Netherlands. When a colleague reads my results he tells me that the conclusions make one ethnic group look particularly bad. I agree with him that my outcomes could be used to further stigmatize an ethnic group that already receives a lot of negative media attention. What do I do?
Two conferences

I have just finished my first paper. My supervisor suggests that I should submit the article for two conferences. That way I have a better chance of getting my paper accepted. I actually see a third call for articles for a conference that also looks promising. What do I do?
I wrote a paper with two other researchers, Sarah and Bart. I have now to decide on the first author of the paper, who gets most of the credit. I was the one with the conceptual idea and did the team coordination. Sarah did the data collection and has spent the most time on the project. Bart’s contribution was valuable as well; moreover, he just been appointed to a new post and really needs publications. What do I do?

A  I make myself first author.
B  I make Sarah first author.
C  I make Bart first author.
D  I have us all draw straws and let destiny decide.
During a particular research project that I am participating in as PhD student, the project leader has many projects going on at the same time. We are mainly supervised and coached by senior PhD candidates or post-doc researchers. When I want to publish an article, the project leader asks me to put his name first. When I respond negatively to his request he becomes angry saying: “It was not a question, please consider the position you’re in”. What do I do?

Not a question

A. I say nothing at the time, but discuss the incident with some senior colleagues.
B. I tell him that he should consider his position and stop right now. I threaten to report his misconduct.
C. I let him have it his way. He will probably return the favour at a later stage.
D. I tell him that I did not mean to offend him. I ask whether it is acceptable for him to be second author and explain how much the first article means to me.
An editor of the journal where I submitted my paper contacts me about my research. He wants me to delete some ‘secondary’ conclusions in order to highlight the main findings in the paper. He justifies the approach by stating that I would not have to change the overall conclusions, but just present them in a different manner, which would probably increase the impact of my research. What do I do?

A) I comply with the editor’s request and leave out the secondary conclusions.

B) I write one sentence about them but leave them out of the main conclusions.

C) I include the secondary findings, but downplay them in my conclusions.

D) I do not comply with the editor’s request and tell him to take my research as it is, or else I will approach another journal.
Reference

The editor of an international journal conditionally accepts my paper, but asks me to change some of the sources used (i.e. mostly in the literature review) to include more references from his journal, including one of his own articles. Content-wise it does not add or diminish the value of the article. What do I do?

A I understand the reasoning behind the requests, and therefore change my sources, maintaining the same data and conclusions.

B I request that the editor still accepts my paper, without changes, as I believe the current sources are the most appropriate.

C I do not agree with this sort of 'blackmail' and retract my paper before approaching another journal.

D I tell the editor I agree. I add all the suggested articles except one: the article written by the editor.
Two sides of the coin

I am in the process of data collection together with a very promising student assistant. The student is paid for his work from the project budget. I suspected that we had enough data in our university library. Unfortunately, I find out that the data is more limited than I thought. To carry out comprehensive research I need to buy an expensive data set. It would mean that I could no longer afford the student assistant. What do I do?

OPTION

A  I do what I can with the data from our own library.
B  I let the assistant go and buy the data set.
C  I buy the data set and ask the student to work on the project for free. In return I promise her that I will try my best to get her a PhD position.
D  I find out where there is enough data and adjust the scope of my research accordingly.
Free lunch?

I am starting my PhD project and as a first task I am asked to rewrite a paper by a former PhD colleague who has meanwhile left academia. I notice the paper needs only small changes and the reviewers are very mild and friendly, so the paper may get accepted in the next round. My professor suggests putting me as last author, to support my academic career, despite my limited contribution to the actual research process. He will himself be the first author. The former PhD has agreed that others can use his work, but no specific agreements were made. What do I do?

A: I agree to the offer and get listed as last author.
B: I suggest that I should be mentioned in a footnote, but not listed as author.
C: I contact the former PhD and ask him whether he wants the publication in his name.
D: I decline the revising job; I do not want to be involved.
Spoilsport

I am using data from a widely used data source within my institute. While processing the data, I come across some systematic problems (missing values, outliers) that apparently nobody has ever bothered about before. Remedying the error accurately would take me half a year. My supervisor suggests following “common practice”, without specifying. Common practice is not to report the problem. Alternative sources are not readily available. What do I do?
I agree with the goals of the supervisor and aim for top journals. I tell him I agree with his goals. In practice I will try to get my articles published in any relevant journal that will contribute to my PhD. I tell my supervisor of my limited ambitions, accepting the possibility that this jeopardizes my PhD track. I try to find another supervisor who is willing to accept my more limited ambitions.

**Going for the top**

At the very beginning of my PhD project, my supervisor tells me he really wants to publish in the absolute top journals. I am afraid it will take more than five years to do so. As I am not planning on an academic career later, second tier journals will do. What do I do?
I do as she requests and accept the possibility of missing the deadline.

I agree with her request. In practice I do as little as I can get away with.

I tell her my deadline is more important than any verbal agreement.

I ask my supervisor’s supervisor if I should agree with the request.

Torn

I have just started writing my research proposal. There is still a lot to do, but providing I have no other obligations, I should be able to meet the deadline for submission. However, my supervisor is co-chairing a conference and she wants me to assist her in preparing this. When I tell her I need time for my proposal she tells me that we had agreed beforehand that I should do some work of this kind. Missing the deadline could mean a serious delay as the committee does not meet frequently. What do I do?
Head over heart

In my first draft proposal for my PhD research I have chosen a research area that I have always been very passionate about. My supervisor knows of my passion but thinks that the research area is highly competitive and publications will be too difficult for me. He tells me that if I want to be reasonably sure of finishing in four or five years I will have to choose a different field. He suggests some other areas in which he thinks it will be easier to get publications. However, I have never considered these areas before and at this point in time I don't think they are that interesting. What do I do?
Reinterpretation

I am writing a paper with two colleagues. I am working on the statistical analysis of the data, the first colleague gathered the data, and the second colleague put the theoretical background together and formulated the hypotheses. After the second R&R, I re-read the arguments underlying one of the hypotheses. Some of the underlying articles' meaning has been heavily re-interpreted, to the point that some could argue it has been misrepresented. I am not primarily responsible for the theoretical section, but I am still one of the co-authors. What do I do?

A. Keep quiet. If the reviewers and editors have not noticed, the interpretations of the papers given by my colleague in the formulation of my theoretical section might be legitimate.

B. I redo the theoretical section myself. As it takes a lot of time I tell the others I want to be first author.

C. I tell my colleague about my different interpretation. If he adheres to his original opinion, I accept this and let it go.

D. I discuss the issue with the third colleague directly (the one responsible for data gathering). I feel betrayed by the colleague writing the theoretical section and try to convince my other peer that he should be dropped from the project, even though the research idea was his.
One drink too many

A month ago I was having a few drinks with one of my colleagues. We had a very good discussion about our research area and I shared some of my ideas that I was considering for research. I have now actually done some literature study on the topic. Suddenly I discover that the same colleague has used my insights and written a paper about the subject. When I confront him, he says that he did not steal my ideas, but that they emerged from our brainstorming session. What do I do?

A. I threaten to take the issue to the department chair if the colleague does not retract his paper.
B. I contact the university’s integrity counsellor and follow her advice.
C. I tell the colleague that I will accept the situation if he makes me second author.
D. I accept I have been too slow, and vow never to talk about ideas that I have not yet published on.
Stumbling across the finish line

The final publication I need for my tenure is in the final stages of review. Many people in my department know of my research and they are not expecting any trouble during the review process because of the ground-breaking ideas. By chance I stumble upon a tiny error in the methods section. Although barely noticeable, the minor mistake ruins my whole study and the relation I have discovered vanishes if the error is remedied. However, I am still convinced that the relation found in the data does in fact hold. What do I do?
Fitting

I am in the process of data analysis. I have used several statistical methods that have produced only partial significance. Suddenly I find a method which does not exactly fit my research design and the nature of the data and variables but it gives a much better and significant result. What do I do?

**Option A**
I adopt the new method without thoroughly discussing the problems of using it.

**Option B**
I stick to the method which suits my settings better regardless of having partial results.

**Option C**
I adopt the new method and openly discuss the problem in my paper.

**Option D**
I discuss both methods in my paper.
Role-play

I am collecting data for experimental social research. In the experiment I have to assign persons either role A or role B. Today is an important day as I have finally assembled a large group of participants for the experiment. Part of the group consists of university students, whereas the other half is made up of people with only primary education. Everybody understands the description of role A. But as I explain role B I find out that only the students understand the tasks that are required of them. What do I do?
Three is a crowd

I am writing a paper with two of my colleagues. We all provide input at the beginning of the research process, but as the writing of the paper gradually develops, it appears that the texts of one of the colleagues are rewritten every time by me or the other author. Eventually, I have a kind of click with the second author and the two of us are basically doing all the work. The communication with the third author is quite problematic. By the submission deadline, it has become clear that the paper is primarily a product of the second author and me. What do I do?
Credit

I have just finished an article to submit to a journal. I have done the research with input from several more researchers, but it was me who did most of the work. They gave their input on the theoretical framework, but I collected the data, analysed the data and wrote the article. I feel it is fair they are listed as co-authors. However, my former supervisor, who is a very influential scholar in the field, has asked me to list him as a first author, even though he did the least work. He has a reputation for being arrogant and overbearing, and I would like us to maintain a good relationship because he has really helped me in the past and can offer me opportunities in the future. What do I do?
Don’t stand so close…

I have just started my PhD and I am really happy with my supervisor. However, there have been rumours of him dating one of his other PhD students. I have not seen anything out of the ordinary, although it is true that he spends a lot of time assisting her in the research. Today, when I leave the office late at night, I see them standing close together in his office, but I could not really see what exactly was going on. I feel quite confident that it was more than just a work related talk. What do I do?
The black sheep

I am supervising a team of PhD students that work closely together on a research project. During the last couple of weeks I noticed that one of the students is being bullied by the others and his work is clearly no longer taken seriously by the group. The student is from a different background than the others. When I confront one of the bullying students with the behaviour he tells me that the person in question is just annoying, does not contribute anything useful and frankly just slows down the project with all the non-relevant issues he raises. What do I do?

<table>
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<tr>
<th>OPTION</th>
<th>DILEMMA</th>
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<tbody>
<tr>
<td>A</td>
<td>I investigate the actual contribution of the student. If the contribution is minimal I take him off the project.</td>
</tr>
<tr>
<td>B</td>
<td>There is clearly no chemistry with the group, so I ask the student to find another project.</td>
</tr>
<tr>
<td>C</td>
<td>I tell the group that I do not want to hear of anymore bullying and that I want them to cooperate in the project.</td>
</tr>
<tr>
<td>D</td>
<td>I tell the majority group that we need to have the student on our team because of demands for a multi-disciplinary approach. They should stop bullying, and accept the minimal contribution.</td>
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</table>
I leave it at that.

I mention it informally to the professor who is the supervisor of us both.

I ask her some more difficult questions about the research to let her know how I think of her behaviour. I leave it to her to do something about it.

I wait for her to present the paper in our seminar series, and then confront her with my findings.

Drop it

I have learned that a senior colleague discarded several observations from a dataset we both use. She did this after finding that the full data set did not support her hypotheses. When I ask her about the procedure she tells me she will come back to me about it. A few days later she tells me that the reason for removing these observations was that the subjects did not complete the survey carefully because they didn’t report demographic information. I really think she made up that argument. What do I do?
In the race

A new assistant professorship has been publicly announced. One of my colleagues from the same department, and I myself, seem to be the only ones with any real chance of being appointed to the post. The colleague and I have a similar number and quality of publications, but my colleague is close to getting another paper published. All she needs is to solve a problem with her data. I know how to solve that problem. If I help her, she will have more chances of getting the paper published, and a better chance of being chosen for the assistant professor job. What do I do?
Taking chances

I want to publish in a top journal. One of the editors of the journal has published work in the same area as the article I would like to publish. However, my work very much disagrees with the publications of the editor. From colleagues I have understood that it might severely affect my publication chance. What do I do?

A. I try to publish the article anyway.
B. I rewrite the article so that it might not disagree as strongly.
C. I try to have the article published in another, perhaps lower, tier journal.
D. I wait with publishing until the editor has left the journal.
Credibility

Whilst trying to collect data for my thesis, I run across various difficulties trying to get into contact with companies. This has already caused a serious delay. A friend recommended that I should ‘embellish’ my credentials so that executives will be willing to meet me. He says that I could promise to share relevant business insights from other companies and that I could mention that I have experience as a business consultant. In fact I have no practical insights for managers at the moment and have only done one internship for a month at a consultancy firm. What do I do?
Dilemma Game
Instructions & Suggestions
The Dilemma Game: Professionalism and Integrity in Research

Like in any profession, scientists are frequently faced with dilemmas: Can I exclude particular observations from my research? Can I use exactly the same data set for multiple papers? Should I agree on a colleague being a co-author on a paper to which she has not made a significant contribution? By exposing you to such dilemmas in the context of a critical dialogue, this game aims to support you in further developing your own “moral compass”. This dilemma game was developed as one of the initiatives of the EUR Taskforce Scientific Integrity. The objective of the taskforce has been to raise awareness for and to develop proposals to help maintain scientific professionalism and integrity.

The game lets you consider, choose and defend (and possibly reconsider) alternative courses of action regarding a realistic dilemma regarding professionalism and integrity in research.

Participants will also come to appreciate the dilemmas that others are faced with, how they resolve them and the reasoning behind these solutions. The game encourages participants to discuss issues relating to professionalism and integrity, and to help one another to find solutions for their own dilemmas.

The game can be used in a variety of settings. It can be used in a course setting, for instance for a group of PhD students. Or it can be used in a research strategy meeting of a department or institute. Depending on the objectives, it may be used primarily as an exercise to let people exchange opinions and experiences, or also as a step towards defining more formally defined principles, on for instance co-authorship. Often, it may be very effective to let participants come up with their own dilemmas, after playing a number of dilemmas from the game. Whichever setting or objective, the game may be helpful in bringing attention to “The Netherlands Code of Conduct for Scientific Practice” (Association of Universities in the Netherlands, 2012), which is applicable to every university scientist in the Netherlands.

The 75 dilemmas included in the game have been collected through sessions at different EUR schools, and among researchers who use different research strategies and who are in different stages of their careers. In that way, we have aimed to develop a set of dilemmas that are relevant to a diverse population of researchers. While the dilemmas are based on actual cases, they should be recognizable and relevant to many researchers. Should you wish so, you can preselect a particular set of dilemmas to ‘play’, based on for instance a particular phase of the research process you want the discussions to focus on. Further information on the use of the game, and digital copies of the game itself, can be found at www.eur.nl/integrity.

We hope that the game, as one of many initiatives, may help foster more continuous awareness to dilemmas in research, and in particular stimulate a more open and critical discussion of our respective norms and behaviours.

Prof. dr. Henk Schmidt, Rector Magnificus
Prof. dr. Finn Wynstra, Chair Taskforce Scientific Integrity
Instructions

Below are the instructions for the standard procedure to play the dilemma game. Experience shows that discussing each dilemma takes about 10 minutes, and that playing between five and eight dilemmas in total is the most effective: it offers sufficient variety while not becoming too long.

Often, after playing a number of dilemmas from the game, it may be very effective to address the dilemmas of participants themselves.

A plenary debrief, particularly when there are several groups, may be useful, for instance to identify dilemmas or more general themes for which there was strong disagreement.

In total, playing the game typically takes between one and two hours. Still, you are free to use the dilemmas in whatever way you see fit!
Dilemma categories

Each dilemma has been classified in terms of three categorisations: Researcher Position, Research Strategy and Research Phase.

In the Dilemma Overview in the back of this rulebook, you can find which dilemmas relate to which specific research strategy, research phase and researcher position. This may help you to select a particular set of dilemmas, should you wish to do that. Alternatively, you may leave it up to each group to skip some dilemmas. The symbols and colours on each dilemma card may help decide quickly on whether to skip it or not.

Still, do not use the categorisations too restrictively, and preferably not in combination with each other. For instance, there may only be a few dilemmas in the set for Research Leaders active in Survey Research. For a relevant discussion, most of the dilemmas can be easily ‘translated’ to your own specific dilemmas.

Also bear in mind the following:

In each of the three categorisations, we have used the label “General” if it applies to more than one category (e.g. to both survey and experimental research).

Some categories are not always clear-cut; e.g. dilemmas in Data Processing & Analysis are often related to dilemmas during the Publication phase.

In each of the three categorisations, we have used the label “General” if it applies to more than one category (e.g. to both survey and experimental research).
Preparation

Participants are divided into groups of four. The game can also be played in groups of three or five, if that fits better with your group size. Each group receives a tracking sheet. (Please make copies of the original tracking sheet from the game.) Each individual player receives four option cards (A, B, C and D), and “OK” and “Not OK” voting cards.

The dilemma cards are placed on the table with the text facing up. The participants of each group of four decide who will go first.

Note: When playing the game with multiple groups, it may be useful – but not necessary – for an effective plenary debrief to use the same dilemmas.

Playing the game

1. The first participant (“player”) takes a dilemma card from the deck and reads it out loud.
2. Each of the four participants chooses one of the four alternative courses of action, which best reflects his/her preference.
3. Each of the four participants places the card with the letter of the chosen option (A, B, C or D) face down on the table.
4. The player turns the option card over and explains her/his preferred course of action.
5. The other participants take turns to each reveal and explain their own preferred action.
6. In case of disagreement, the participants challenge and defend the different options (max. 5 minutes). (Note: in this discussion, participants can be encouraged to reflect on the different actions with respect to basic principles, such as the ones in The Netherlands Code of Conduct for Scientific Practice.)
7. All four participants reconsider their own choice, putting their option card face down again.
8. The player reveals her/his final choice.
9. The other three participants then each decide whether that choice is acceptable to them and lay the appropriate voting card (“OK” or “Not OK”) face down on the table.
10. One by one, the other participants turn over their cards to reveal their “votes” and the results are noted in the tracking sheet.
11. The next player reads the next dilemma aloud.

Note: Putting the option and voting cards face down first ensures participants make an independent choice first.
Debriefing the game

After playing a number of dilemmas, a plenary debrief is typically helpful. This is where the tracking sheet may be used. There is no winning or losing in this game. Hence, the tracking sheet is not meant to identify which people changed or did not change their opinion. Rather, the game debrief may focus at the dilemmas, addressing questions such as:

- For which dilemmas did most of the players agree with the final choice?
- Do these dilemmas relate to particular categories or themes?
- For which dilemmas did most of the players disagree with the final choice?
- Do these dilemmas relate to particular categories or themes, e.g. data analysis?
- What were the main points of contention?
- How come people disagreed (e.g. differences in experience, training, background, ...)?
- What were the most popular other options?
- For which dilemmas did most players change their mind as a result of the discussion?
- What were the most convincing arguments used in the discussion?

Depending on the particular setting in which the game is played, this debrief may be continued with a discussion on which areas the participants feel there is insufficient consensus, and how to best address such future dilemmas in their daily work, and how to achieve a more commonly shared set of values and principles.

Overview of dilemma topics

<table>
<thead>
<tr>
<th>Researcher Position</th>
<th>Card numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>2; 5; 8; 9; 10; 11; 12; 14; 15; 16; 17; 18; 19; 20; 23; 24; 26; 28; 35; 36; 41; 44; 48; 51; 53; 55; 56; 57; 59; 63; 64; 66; 67; 68; 72 and 74.</td>
</tr>
<tr>
<td>Research Leader</td>
<td>1; 4; 7; 22; 27; 31; 33; 37; 43 and 71.</td>
</tr>
<tr>
<td>Researcher</td>
<td>3; 6; 13; 21; 29; 30; 42; 45; 46; 49; 50; 69 and 73.</td>
</tr>
<tr>
<td>PhD Student</td>
<td>25; 32; 34; 38; 40; 47; 50; 52; 54; 58; 59; 60; 61; 62; 70 and 75.</td>
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<tr>
<th>Research Strategy</th>
<th>Card numbers</th>
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<tbody>
<tr>
<td>General</td>
<td>1; 2; 3; 4; 5; 6; 7; 8; 10; 11; 13; 14; 15; 16; 17; 20; 22; 23; 25; 27; 29; 31; 32; 33; 34; 35; 36; 37; 38; 39; 40; 41; 42; 43; 44; 45; 46; 47; 48; 49; 50; 51; 52; 53; 54; 55; 56; 58; 60; 61; 62; 63; 64; 65; 66; 68; 69; 70; 71; 73; 74 and 75.</td>
</tr>
<tr>
<td>Survey Research</td>
<td>9; 12 and 72.</td>
</tr>
<tr>
<td>Experiment/Clinical</td>
<td>18; 19; 21; 24; 26; 28; 30 and 67.</td>
</tr>
<tr>
<td>Existing/Collectable data</td>
<td>57 and 59.</td>
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</tbody>
</table>

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<tr>
<th>Research Phase</th>
<th>Card numbers</th>
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<tbody>
<tr>
<td>General</td>
<td>1; 33; 37; 42; 60; 61; 70 and 71.</td>
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<tr>
<td>Research Design</td>
<td>23; 29; 40; 45; 62 and 64.</td>
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<tr>
<td>Data Collection</td>
<td>26; 28; 30; 57; 67 and 75.</td>
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<tr>
<td>Data Processing &amp; Analysis</td>
<td>11; 12; 14; 15; 17; 21; 24; 32; 49; 50; 59; 65; 66; 72 and 73.</td>
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<tr>
<td>Data Archiving &amp; Access</td>
<td>13 and 16.</td>
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<tr>
<td>Publication</td>
<td>2; 3; 4; 5; 6; 7; 8; 9; 10; 18; 19; 20; 22; 25; 27; 31; 34; 35; 36; 38; 39; 41; 43; 44; 46; 47; 48; 51; 52; 53; 54; 55; 56; 58; 63; 68; 69 and 74.</td>
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Additionally there are some dilemmas about external funded research. These dilemmas can be found on cards 23; 28; 29; 31; 33; 35; 37; 39; 42 and 45. Lastly, issues about reviewing can be found in the dilemmas 36 and 41.
OK
Tracking Sheet

This sheet is used to track the choices of the participants, per group of four. In the first column, note the number of the dilemma that is being played. In the second column, circle the initial choice of the player (the “focal” participant for that dilemma). In the third column, indicate the initial choice of the other participants. In the fourth column, note the final choice of the player after the discussion.

In the three last columns, note the number of participants who agree (column 5) and disagree (column 6) with the player’s final choice and the total number of players who changed their minds after the discussion (column 7).
<table>
<thead>
<tr>
<th>Dilemma number</th>
<th>Initial choice of player (circle)</th>
<th>Initial choice of other participants</th>
<th>Final choice of player (circle)</th>
<th>Number of colleagues agreeing with final choice</th>
<th>Number of colleagues disagreeing with final choice</th>
<th>Total number of players who changed their mind after the discussion</th>
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<tbody>
<tr>
<td></td>
<td>A B C D</td>
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Totals: